The National

Future Farmer

Owned and Published by the Future Farmers of America

June - July, 1964

"Did ya hear? He's buying it. Just the one I hoped we'd get."

Remember the first time you went with your Dad to buy a tractor? These youngsters are getting a lesson in buying that's good for them. Many of you are already making your own buying decisions. And there are few things that can make anyone think harder than making a major purchase with his own money.

Have you noticed more Big Orange Tractors these days? You should, because they're moving onto farms in ever-increasing numbers. Reasons? Many. Allis-Chalmers dealers are long-time supporters of F.F.A. They'd really like to talk with you about any of the long line . . . D-10 to Big D-21.

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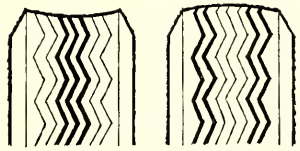
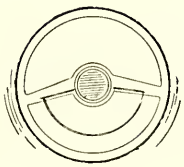
Will you know what to look for when buying your first car?

Buying a used car? Learn to read the signs—the tires, the sheet metal, the upholstery. They can tell you much about how the car was driven and about its general condition. You'll end up getting more car for your money, making your first car an even bigger pleasure than you'd hoped.

1 Look at the car from all angles and under the hood. Do you see any welds? How about the rocker panels? Any evidence of filler metal? Find out how badly the car was damaged. If the frame was bent, be careful of this one.



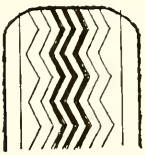
2 Here's one on tires. These pictures show the results of under- or over-inflation. If tires weren't properly inflated, they can't have the mileage left in them. More important, it suggests the previous owner wasn't too attentive to maintenance. Don't pay for his carelessness.



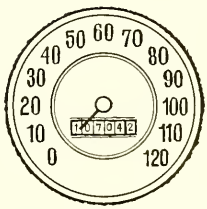
3 Check the steering wheel. Don't stand for more than two inches of free play. More than that is unsafe and could involve you in an expensive repair job.

4 Take a look at the inside of the tail pipe. Is it black and greasy? If it is, the chances are the car has been burning oil for some time. A good one to stay away from.

5 How about the brake pedal? Does it offer firm resistance after you press it down an inch or two? If it doesn't there could be a leak in the system—and another expensive repair.



6 Here's another clue in the tires. Are the edges of the tread, where they meet the sidewall, still square? Or are they rounded off? If the latter, somebody's been peeling rubber on corners. That doesn't suggest careful handling. Probably not the car for you.



7 You've checked the odometer mileage of course. But don't be satisfied with that. Take a look at the upholstery, too. If the driver's seat is depressed, the car probably has lots of miles on it. Look at the pedals, too. Does the wear on them suggest more mileage than the odometer? If they're brand new, be suspicious.

If the car drives like new—responsive, firm, no rattles—chances are you have a good machine. But the best ten-dollar investment you can make is to have a mechanic friend check it over carefully *before* you buy. Good luck and good driving.

What tire is first choice for original equipment on new cars? Firestone—with good reason.

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The National Future Farmer
Owned and Published by the Future Farmers of America
VOLUME 12 NUMBER 5
JUNE-JULY, 1964
THE MAGAZINE FOR YOUNG MEN IN AGRICULTURE

In This Issue

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50 Pest Shooting for Sport

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Our Cover

In golden ripe fields of grain from coast to coast, Future Farmers will venture forth this month and next to help harvest the nation's crop.

It was such a setting not long ago that framed American Farmer Gary Klein as he began harvesting on his Nebraska farm. Blue skies, golden grain, and shiny red machinery quicken the pulse of farm youth as they did for Gary that July day.

PHOTO BY C. A. CROMER

THE NATIONAL FUTURE FARMER is mailed every two months on the following dates:

January 20.....FEBRUARY-MARCH Issue
March 20.....APRIL-MAY Issue
May 20.....JUNE-JULY Issue
July 20.....AUGUST-SEPTEMBER Issue
September 20.....OCTOBER-NOVEMBER Issue
November 20.....DECEMBER-JANUARY Issue

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FOR TALL THINKERS

Thinking "tall"—which means stretching your thinking above the kind you do when you just want to get by—brings you several rewards. Tall thinking spurs you on to do a bigger job. And when the job is done, you have the reward of satisfaction within yourself for having done it.

At Purina, we'd like to reward your tall thinking in another way. We've started a whole new program of Youth Awards for both boys and girls. They're the two handsome trophies pictured above—modeled after the famous Danforth Youth Statues at Gray Summit, Mo., and Washington, D. C.

If you're a tall thinker—and if you'd like to win one of these Ralston Purina Youth Awards, ask your Purina Dealer or Purina Salesman for details. Or, write us at . . .

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Your Editors Say . . .

MANY state conventions have already been held, and others will take place between now and August. These are eventful occasions when outstanding Future Farmers receive awards for their year's work in leadership and farming. Perhaps you were one of them or know someone who did receive such recognition.

How were they provided? The type of FFA awards program may vary some from state to state, but much of the money is provided by the Future Farmers of America Foundation, Inc. As you probably know, this is a group of more than 300 business and industrial concerns, organizations, and individuals who make contributions to the FFA Foundation. Each year FFA members receive more than $150,000 in awards, and about 70,000 FFA members receive medals from the Foundation. These people have a sincere wish to help and encourage FFA members toward the goals of establishment in farming, development of rural leadership, and the practice of good citizenship. The funds contributed are administered by a Board of Trustees composed entirely of men who are active in the vocational agriculture program.

But before the awards can be provided, funds must be raised. Each year the donors have a Sponsoring Committee that raises funds for the Foundation. Some of the top men in the business world have served as chairman of this committee.

The current chairman is Mr. Curry Stoup, president of the New Idea Equipment Company at Coldwater, Ohio. Mr. Stoup has assumed his responsibilities with enthusiasm and reported at the regional conferences in agricultural education that contributions and pledges of contributions are coming in at an excellent rate with many new donors this year. This is a vote of confidence in you and the FFA.

Why is this money contributed? It is expressed quite well by Mr. J. Ward Keener, who served as chairman of the Sponsoring Committee in 1963. His remarks appear in the proceedings of the 36th National FFA Convention but seem appropriate to share with you here.

Mr. Keener says: "Contributions from industry to Future Farmers of America Foundation set an all-time record in 1963 with a total of $200,849 collected in cash and pledges. This certainly is a positive indication of the high regard businessmen have for farm youth and a demonstration of businessmen's eagerness to contribute to programs for farm youth.

"The four basic reasons why we support your organization are:

1. We respect you because of your contribution to the strength and welfare to our country.
2. We admire you because of your ambition and industry.
3. We hold you in great esteem because you are living and demonstrating the most cherished and essential ingredients of our American Heritage: self-reliance, individual initiative, perseverance, and love of freedom.
4. We want to help you because the world needs new scientific, educated farmers—farmers who can meet the needs and requirements of these fast moving, rapidly changing times."

You should become informed about these FFA Foundation donors because they are interested in you. When you receive a medal or cash award, never fail to find out who provided it and write an appropriate thank you letter. For your National Foundation medal or award, send your letter to the chairman of the Sponsoring Committee. This small courtesy is sometimes overlooked and means a great deal to those who are supporting the FFA.

Wilson Carnes, **Editor**

Running in the red?

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Texaco Farm Service can help reduce fuel costs almost 15%.

An efficient maintenance program, using top-quality petroleum products from Texaco, can help reduce fuel costs almost 15%. That's under average conditions.

Let's say you have a typical late-model tractor. Research shows that, generally, it will burn about 5 gallons of gasoline per hour. The cost is about $1 an hour.

But, with a good maintenance program, you can average a saving of $1.50 for every 10-hour day you keep your tractor working. In total working days for a single season, this can add up to healthy savings for your farm.

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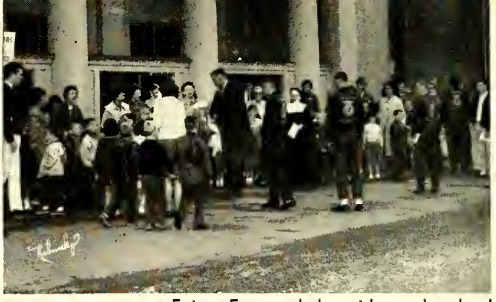


Future Farmers help guide grade school children through the live science lab.

UNTIL this fall, many metropolitan youngsters from the Portland, Oregon, and Vancouver, Washington, areas had never seen a sheep sheared or a cow milked. To them, a beef animal was no more than a hamburger and a market hog only their breakfast bacon.

But Future Farmers from Washington and Oregon and the 1963 Agriculture Acquaintance Program brought agriculture a lot closer to thousands of these urban students and teachers.

Early in 1963, Dick Richards, manager of the Pacific International Livestock Exposition in Portland, Oregon, and a long-time friend of the FFA, together with the Exposition's board of trustees, conceived the idea of city student tours at the 1963 Exposition.

The State Department of Education was called into the project. Leonard Kunzman, supervisor of agriculture education, saw the vast opportunities this program could provide, and a live agricultural laboratory for science study was born. Portland area business firms, farmers, bankers, school administrators, and livestock breeders offered physical and monetary resources. The Pacific International Livestock Exposition made funds available for the personnel required.

During the summer, a director for this program, DeLane Fry, past state FFA president, was selected. The dates for the tours were set for October 14 through 18 and an illustrative brochure sent to every school in surrounding counties in Oregon and to schools in Clark County, Washington.

The response by elementary school teachers was overwhelming. Over 4,000 children were registered the first day. Registration soared to over 20,000 in less than two weeks. Some schools sent every child in each of their eight elementary grades. The city of Vancouver sent 500 children daily. Most classes came for the two-hour tour, but some stayed all day in order to fully enjoy the offering of this educational exhibit.

The children made stops in the poultry area where fancy as well as production poultry was shown. Beef breeders

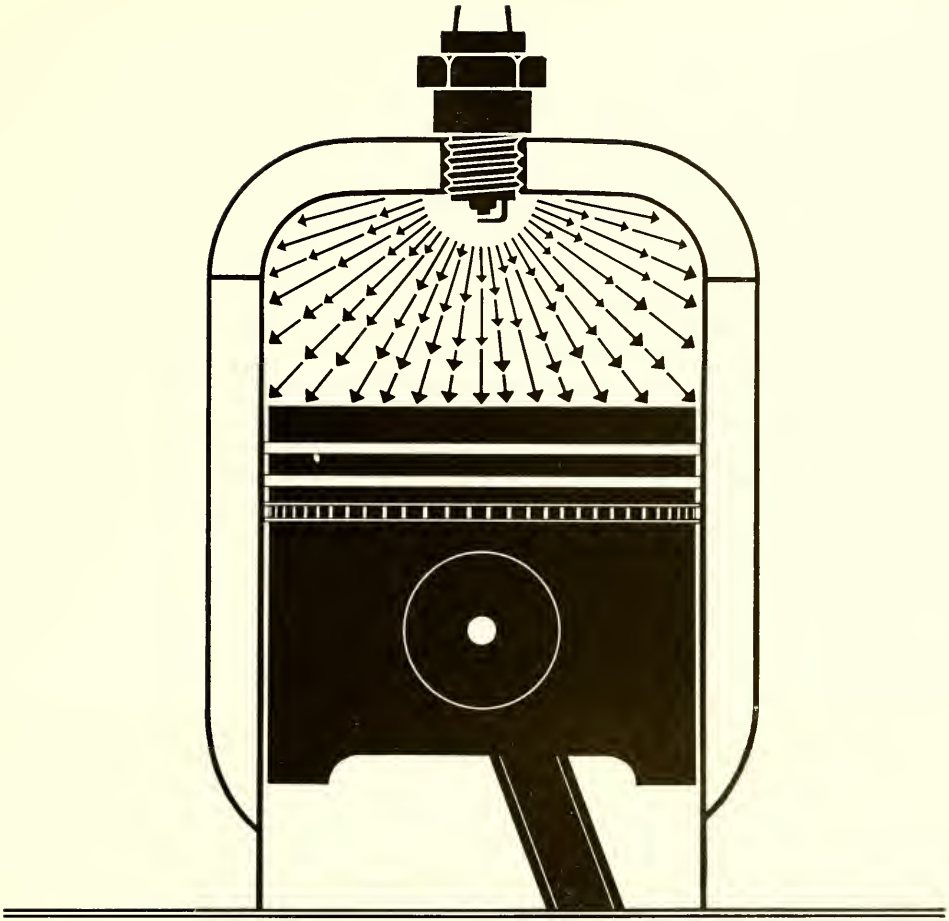
"Here's how sheep are sheared," an FFA member tells group of children.

pointed out different breeds and cuts of meat, and the swine barn superintendent did his best to explain the large ears on the Landrace gilts and the turned-up nose on the Berkshires. They moved on to the horse barn where breeds of nearly every horse, draft as well as Shetland pony, were housed.

Each day sheep were sheared as the fascinated youngsters looked on. They were treated to a tremendous wool display arranged by the Pacific Wool Growers showing wool from the time it is sheared until it is made into garments. The tour included the dairy barns and a milking demonstration. FFA guides were continually bombarded with questions. "Why doesn't that cow have horns?" "You mean that's what I ate for breakfast?" "Why are those chicken's feathers ruffled?" "Is that where my milk comes from?"

The informed Oregon and Washington Future Farmers not only guided the groups but ably explained the importance of agriculture. Final totals showed nearly 24,000 school children had gone through on tours. The enthusiastic management of the Exposition is thinking in terms of 50,000 children next year.

Nearly 350 Future Farmers from 20 Oregon and Washington chapters served as guides, and over 300 grade schools took advantage of this educational opportunity. This was just a small part of the program which is being used to inform the public that not only vo-ag and the FFA but all agriculture in Oregon has a real future in our nation's economy.



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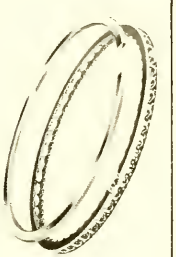

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Looking Ahead

POLYOLEFIN BALER TWINE

Baler twine from a man-made fiber will soon be available to farmers. The premium quality product, the result of a new method of producing artificial fibrous twine, is made from a petroleum product available in gas and oil fields of Texas. Lightweight with a 125-pound tensile strength, the Polyolefin twine can be used in ordinary balers without special attachments. It will be produced in balls the same as convention sisal twine by a subsidiary of the Eastman-Kodak Company.

FIRE-RESISTANT PAINT

Now USDA researchers have an outdoor paint that is not only durable but fire resistant as well! It looks like ordinary paint and can be applied with a brush or roller. However, when it is exposed to flames, it develops a thin, carbon-containing layer that acts as an insulating barrier against fire. The experimental paint contains oil from tung nuts, an important farm crop in the U. S. Gulf Coast region. Work will continue until the product can be released.

GROW PLANTS IN PLASTIC

Clemson scientists are growing young fruit and vegetable seedlings in plastic without soil. Instead of soil, the tiny plants are set into pot-shaped plastic foam looking like black styrofoam. The foam is porous and can be sliced with a knife. Since the foam contains all the necessary plant nutrients, all the grower need do is add water. When the plant is rooted, the entire pot and plant can be planted.

PACKAGING FILM FROM CORN

A Nebraska firm will soon be making an edible, water-soluble packaging film from high amylose corn starch. The new corn-based packaging film will be not only transparent but strong and flexible as well. It can be heat-sealed, imprinted, and is grease-resistant. When boiled, it becomes edible along with its contents. Farmers in the Nebraska area will grow the high-amylose corn on a contract basis for the American Maize-Products Company, who will produce the film at the rate of 825,000 pounds per year.

INSECTICIDE THAT CAN BE EATEN

Entomologists at the University of Kentucky have successfully controlled cattle horn flies by putting an insecticide in cattle salt blocks. The insecticide, called ronnel, was fed to cattle both through salt blocks and free choice as a control against face flies, heel flies, and horn flies. After the 75-day test, researchers found horn flies to be completely controlled, while the other pests were partially controlled. The test cows did not hesitate in eating the insecticide.

"MILKOGRAF" CHARTS COW EFFICIENCY

A portable "Milkograf" has been developed in Sweden to help dairymen pinpoint milking problems and their causes. The Milkograf is suspended from the vacuum line near the cow to be milked and the milker pail hooked onto a spring balance. The weight of the milk entering the pail is transmitted to a recording pen and graph. The resulting graph shows each cow's sensitivity to stimulation, rate of milk flow, milk let-down time, stripping requirements, and reaction to disturbances. Its biggest advantage will be spotting all problems in milking, DeLaval officials report.

Take a tip from top raisers... **FEED THE**

Holstein breeder N. Newcomb, Cods Point Farm, Trappe, Md.

"Our calves and heifers both benefit from the Milk-Bank Boost. Kaff-A Milk Replacer gives us healthier, heavier calves, cuts scouring. Kaff-A Booster Pellets help heifers grow faster, breed sooner."

Manford Stewart, Frankfort, Ind., leading Hampshire breeder

"We produced 4,000 certified pigs last year, and Kraylets is a key part of all our feeding programs. The Milk-Bank Booster gives us bigger, healthier litters, better feed efficiency, less backfat. Keeps sows in good condition."

Henry Kruger, owner of Kruger's Poultry Farm, Dinuba, Calif.

"During a recent cold snap, some of my neighbors had 50% drops in production. My flock held its 76% average, thanks to the Milk-Bank Boost of Pex Pellets. I get 80% large eggs and less culls, using Pex the year around."

Delavan, Minnesota

I wish to congratulate Earl DeWilde on his very fine letter in the April-May issue of your Magazine. I think it is very timely and worthy of thought from all of us.

This year is my first in FFA, but as a farm boy I have been aware of the increasing price squeeze the farmer has been caught in for some time. I think the farmers of the past few years deserve a pat on the back for learning to farm more efficiently, but I think the farmers of the future will deserve an even greater one if they can meet the challenge of learning to market efficiently.

I sincerely hope we will see articles in this and other farm publications soon that will guide us in learning to sell America's Number One crop—food!

Lafe Ioeger

Merced, California

Though I do not often write to any magazine, I felt I should write to tell you how I enjoyed the article on "Dairy Bulls for Beef" in the April-May issue. I, too, agree with James Nichols on most points.

On one point I do not agree. Although we are eating more beef, more and more is coming from South America. I also think we should have more dairy steers instead of dairy bulls. A member of my chapter is taking two Holstein steers to the Los Banos fair, and I think I will write to tell you how

his steer dresses out. This may open up a whole new field for Future Farmers who do not have the money to purchase a beef steer.

Roger Schlyter

USS Mount Baker

I'm presently with the United States Navy. I received *The National FUTURE FARMER* during four years of vo-ag at Battle Ground, Washington, and receive it now during my tour of duty to Guam, Japan, Okinawa, the Philippines, and Hong Kong.

After I finish reading the issues, I put them in the ship's library where they are read by many. They have informed me of the many advances and changes in our American agriculture. It reminds me and keeps me reminded that there is a future in agriculture.

Terry Willmschen

Bethanna, Kentucky

I have been in the FFA for two years and am going to remain a member for three years after I am out of high school. *The National FUTURE FARMER* Magazine has been a great help in the time I have been in the FFA.

I save each issue that I get, and already they are a great help in case I need to know something about agriculture in the past months. I am also interested in what other Future Farmers are doing across the nation. I would like to hear from them.

Carrol Pugh

Adrian, Georgia

I would like to take this opportunity to express my appreciation of the fine *National FUTURE FARMER* magazine. My fellow FFA members and I depend on this magazine for up-to-date stories and articles.

As a purebred hog breeder, I especially enjoyed the story of Johnny Meehan, "Expert on Rations," in the February-March issue.

Ralph Donaldson

Topeka, Kansas

I certainly appreciate receiving the information concerning the promotion of the National FFA Calendar. We promote the calendar on supervisory visits to chapters, during area teachers' conferences, state FFA camp, leadership schools, etc. I always run an article in the April 1 issue of the Kansas Future Farmer listing the chapters who participate. We in the state office think the calendar is excellent and has superb public relations value for the program.

John W. Lacey
Kansas Executive Secretary

MILK-BANK BOOST

Milk by-product feed boosters by KRAFT

F. Miller, Mgr., Santa Rosa Stables, Texas, Waggoner Quarter Horse breeders

"Pace Pellets give our colts what they need—a fast, healthy start. The Milk-Bank Boost of Pace is part of our program for mares, studs and show horses, and we think it has a lot to do with keeping them in top condition."

Minnesota Dairyman Archie Zarling raises own Holstein herd replacements

"Kaff-A Milk Replacer gives me big, thrifty, healthy calves. And the Milk-Bank Boost of Kaff-A Booster Pellets produces heifers that can be bred at 12 to 13 months. It keeps my cows' milk production high."

W.W. Callan, owner of Callan Ranch, Waco, Tex., Santa Gertrudis breeder

"We give our showcase herd the Milk-Bank Booster, Kaff-A Booster Pellets. It brings out the best qualities of our stock, helps them gain faster, stay in top health and condition, and gives them extra bloom and gloss."

KRAFT FOODS AGRICULTURAL DIVISION, 500 Peshtigo Court, Chicago 90, Ill.

Farming Without Freedom

A noted farm editor who toured agriculture behind the Iron Curtain tells how our systems differ and why we should keep American agriculture free.

By
Paul Sanders
Editor, Southern Planter

WHAT IS farming like behind the "Iron Curtain"? What accounts for the acute shortage of food in the Soviet Union? Can the Communists compete in the struggle for worldwide power with their present system of socialized agriculture?

After a 15,000-mile trip that took me deep into the remote rural areas of Soviet Russia studying their livestock, crop production methods, and political setup and visiting with farmers and their families, I am convinced that lack of an adequate food supply is the "tin can" tied to the Russian bear's tail. Foods are low in quality and high in price. By our standards, the Russian diet is drab and starchy, woefully weak in meat, milk, and eggs.

There is little likelihood of improving the situation because the farmer cannot make management decisions. He cannot obtain scientific know-how, machinery, and agricultural chemicals—the stuff modern agriculture is made of. Farm policy is decided in Moscow. Machinery, chemicals, and technical manpower are diverted to national defense, propaganda, and the crusade to convert the world to Communism. Farming is the forgotten facet of the Russian economy.

Author Paul Sanders, center, sits with Russian farm workers on a Ukraine farm.

I went over their food distribution system, studied their food stores, and watched Russian women buy groceries for their families. Russians spend 50 percent of their income for food, mostly bread, potatoes, and Bologna sausage. Americans spend only 19 percent of their take-home pay for the finest food of the greatest variety and abundance mankind has ever known.

Yet the Russians look fairly well nourished. They are energetic and healthy. Sanitary standards are low, refrigeration inadequate, and food packaging, as we know it in this country, does not exist. I didn't see a single paper bag in all Russia!

An industrial nation must be based on an efficient agriculture so that surplus farm workers can be released for work in shops, offices, and factories—to grind out the goods and services needed for a strong economy and high standard of living. The Russian farm plant is frustrated, weak, and inadequate.

The Russians still have 45 percent of their labor force engaged in farming—about where the United States was at the turn of the century. Farm workers are mostly old folks, illiterates, and unskilled labor. Farm work is done largely by hand with horses and oxen as major sources of power. Contrast this with the United States where 7 percent of our labor force works on farms producing food, fiber, tobacco, and wood products in great abundance and variety for 190 million Americans. We share 5 billion dollars' worth of farm products with less fortunate peoples across the seas, including Communist-ridden countries.

A typical Russian farm family. Youths wear red kerchiefs, age early in life.

To begin with, Russian farms are too big for efficient operation. Their "state" farms average 58,000 acres; the "collective" farms, 14,000 acres each. Compare this with the United States average of 300 acres per farm, and you see one big difference between the democratic and the Soviet systems. Our people own family farms and work hard and intelligently to make land and labor profitable in order to enjoy a high standard of living.

In Russia, the Government owns all the land, and everyone works for the Government. The standard of living of all Russians is as alike as "peas in a pod." There is no incentive to achieve. Result: low production.

On Russian "collective" farms, the workers draw a very low wage but share

(*Continued on Page 14*)

In this Russian dairy barn 1,200 Red Steppe cows are milked twice a day with electric milkers. Note dry lot feeding.

These Russian farm women handle a large dairy herd, doing the milking, manure hauling, and artificial breeding.

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Farming Without Freedom

(Continued from Page 12)

in returns from production over and above a quota set by the Communist Party. The surplus is sold to the state and the proceeds divided among the workers. This type of operation is on the decline because the quota is being constantly inched up with little "surplus" to divide.

On "state" farms, wages are higher, and there is no participation in the proceeds. Everybody trades at the state stores. It is the old feudal system without compassion.

Farming methods in Russia are a paradox, a study in contrasts. On the same farm one sees practices used since the days of the Pharaohs and others as modern as tomorrow. I saw tractors pulling four-row cultivators alongside 129 women with short-handled hoes weeding hybrid corn; oxen supplying farm power in the shadow of a dozen huge combines being readied for the grain harvest; women gleaning fields, as did Ruth in Biblical times, and others in a nearby modern milking parlor milking a thousand cows with electric milking machines. This strange mixture of the old and the new is Russia's agriculture today.

The clash between the old and the new impressed me as an attempt by the Soviets to move from a peasant type of subsistence farming into modern agriculture. But lack of agricultural research and education; shortage of fertilizers, farm chemicals and rubber-tired equipment; and the dearth of skilled workers on the farm have bogged the program down.

Until the Russian farmer is permitted to own his land, make his own management decisions, and profit according to his effort and intelligence, food shortages will continue to plague Communism and stymie Soviet industrial growth.

Three things are holding Russia together: *Work*—everybody works in order to eat; *Fear* of atomic bomb attack, famine, or someone "squealing" on them; *Promise* of more food, consumer goods, free housing, medicines, and no taxes in the future.

I saw no evidence of social unrest among the Russian people, no signs of dissatisfaction with their system. On the contrary, everyone appeared dedicated to socialism and proud of his achievements. Unquestionably, the average Russian today enjoys a better standard of living than ever before and is working hard to improve it.

What makes Russia tick is a mystery to the West. Winston Churchill once said Russia is a "riddle wrapped in a mystery inside an enigma." I agree. Aren't you glad you are part of *American* agriculture? ◆◆◆

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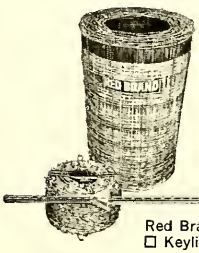

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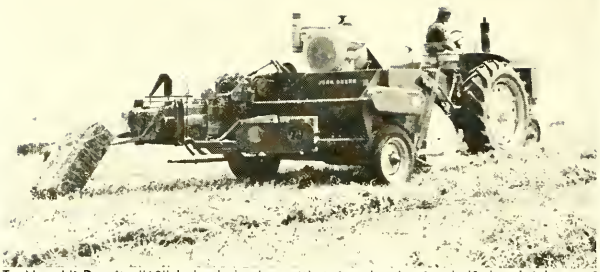

T. New Hi-Density "10" baler bales hay with twice the density, half the shrinkage of conventional bales. Store more hay in same space; PTO or 36-hp engine. (John Deere)

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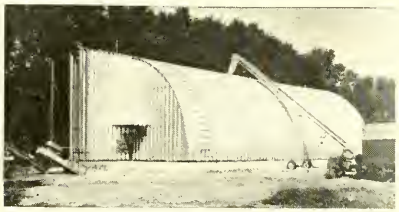
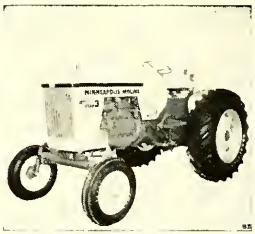
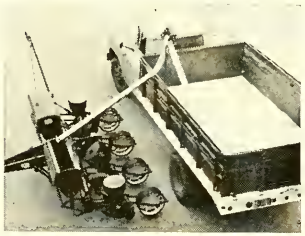


U. "Curvet Silo" is oxygen-free horizontal silo building. Unloaded by remote-control cutter arm in center. Features 600 to 1,200 tons. Stores many varieties. (Behlen)



V. Three-plow "Jet Star Three" has 10 speeds forward. (Minn.-Moline)



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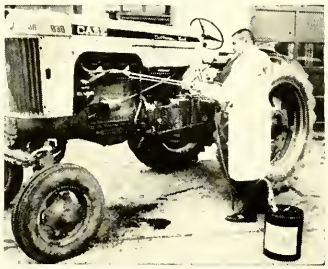

X. Tractor shampoo cleans all farm machinery. Apply with pressure gun and can at a 1/4-inch flow. Guns available at dealer. (J. I. Case)

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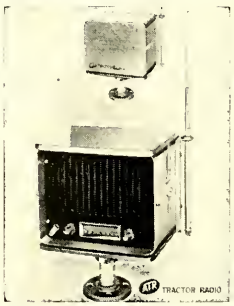

Y. All-transistor tractor radio has dustproof speaker, earphone jack, cover. Easily mounted. (ATR Electronics)

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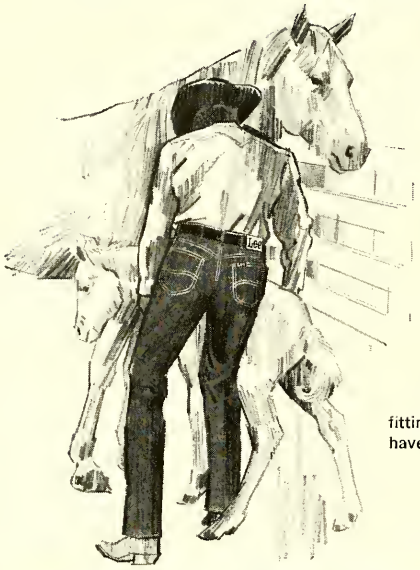

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Lennie Gamage receives his award from Bob Minard as Charles Ocker, at right, and stewardess, Barbara Root, look on.

100,000 Miles For FFA

IN RECOGNITION of nearly a quarter million miles of air travel for *The National FUTURE FARMER*, Staff Members Lennie Gamage and Charles Ocker have received air travel's "100,000-Mile Club" award, sponsored by United Airlines.

Both men now join a select group of several thousand businessmen and air travelers who have earned the special courtesies afforded them by club membership. "By the frequent use of air travel, they have contributed to the U. S. air travel industry," United's representative, Russell Searce, explained.

The award was made recently in an informal ceremony at Washington National Airport by United Airlines' sales representative, Bob Minard. In addition to attractive wall plaques, Gamage and Ocker received luggage tags plus lapel pins denoting them as members of the exclusive travelers' club.

Ocker, former national FFA student secretary in 1951-52, joined the Magazine staff in October, 1956. Also a former national FFA officer in 1955-56, Gamage came with the staff four years later in 1960. Both are regional advertising managers whose responsibilities take them to areas in 20 states from Washington, D. C., to the Dakotas and south to Oklahoma.

Between them, they make over 1,000 calls each year to agencies and agricultural firms, many of them donors to the FFA Foundation. Spending upwards of half their employed time traveling, both men also attend state FFA conventions, company press showings, and agricultural expositions representing the National FFA and the Magazine.

The 100,000 miles of air travel, equal to over four trips around the world, gives evidence of the FFA's widespread program.

When the going's tough and the hours long... you'll finish fresher with The Automated Ones.

These are the job lighteners. The hour shorteners. Because these tractors are The Automated Ones! They do more of your work for you. No stops to clutch and shift down when the going gets tough. Right on-the-go, just flip the Multi-Power switch into LOW... and away you go. The Ferguson System gives you precise, finger-tip control of implements ... and transfers weight automatically to the rear wheels when extra traction is needed. In slick going, Differential Lock provides positive drive to both wheels. All this and more—like Power Steering, Variable Drive PTO—is available on all The Automated Ones to bring you home fresher at day's end! And for comfort, you get the cushioned, shock-absorbing Float-O-Matic Seat on the MF 50, 65 and Super 90. All come with fuel-saving diesel power plants. Or with economical gas engines. See The Automated Ones: the 3-plow MF 35 or 50, 4-plow MF 65, or the big 5-plow Super 90. And save when you buy on the low-cost MF Time Payment Plan. Massey-Ferguson Inc., Detroit 32, Mich.

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Woodruff's Magic Triangle

Boys, Berkshires, Rotarians

By
Paul Weller

FOR MORE than 20 years, a magic triangle of boys, Berkshires, and Rotarians has sparked the northwest community of Woodruff, South Carolina. It's all part of the annual Woodruff Rotary-sponsored FFA swine show that has helped Future Farmers build one of the top chapter swine programs in all of the Palmetto State.

During the 1963 show circuit in breeding and market shows alone, Woodruff Future Farmers won more than $1,200 in prize money and expense-paid trips to the National FFA Convention. In fact, their unique swine program has sent 15 members on expense-paid trips to Kansas City in the past five years. And Rotarians and Future Farmers alike are expecting even greater achievements for 1964.

Woodruff hogs took grand champion honors at Spartanburg's Blue Ridge Fat Stock Show three out of the past four years. The grand champion barrow at the state fair in Columbia was a Woodruff FFA hog, and members can even claim the grand champion boar at the Eastern National Berkshire Show some years back. It all stems from the "magic triangle" developed during the early years of World War II.

Amiable Frank Barton, advisor then at Woodruff, took an idea to the local Rotary Club in town. Why not have

The proof of the success of Woodruff's FFA swine program is written across this board in awards and ribbons. Proud Woodruff Chapter members display the combined winnings outside the vo-ag classroom.
Photo by Wilbur McCartha

The 1962 grand champion open class sow, South Carolina State Fair, was a Woodruff hog shown by Russell Easler.

Another Woodruff hog was named champion barrow at 1963 Blue Ridge Fat Stock Show, Spartanburg, S. Carolina.

26 Rotarians purchase and sponsor 26 registered gilts for his Future Farmers? To make it a continuing proposition, his members would give two gilts in return, one for the gilt received and the other to pay for the breeding fee. The breeding boars would be maintained by the Woodruff FFA Chapter with some assistance from the Rotary Club.

The idea caught on and was put into effect in 1942. Rotary members took such a keen interest in their sponsored animals that when show time rolled around, they were on hand to root both their hog and Future Farmer to victory. It wasn't long before both Rotarians and FFA members were planning for more and better stock.

Three years later, a local feed mill purchased the grand champion Berkshire boar at Van Wert, Ohio, for $1,035, donating the blue-ribbon winner to the Rotary-FFA swine program. Use of the champion boar brought acclaim to Woodruff from breeders over the Southeast. Other chapters and hog fanciers soon came to the FFA for breeding stock, spreading the word that here were some of the top Berkshires in the entire area. In 1946, thanks to Woodruff FFA and their Rotarian friends, the South Carolina Berkshire Association was formed along with a schedule of Berkshire shows and sales.

Today, more than half of the 128 vo-ag students at Woodruff have swine as part of their supervised farming programs. Some raise breeding stock, while others have market hogs. Some have both. You can count 65 breeding animals and 45 market hogs among members at present.

The program is operated on a chapter herd basis, including cooperative marketing of the breeding stock through the chapter. This stock is selected by swine specialists from the best of each member's stock, then sold through the chapter to breeders throughout the area. As long as a Future Farmer is active at Woodruff, he can participate in the chapter herd program. Active participants both buy and sell Berkshires through the chapter plan, using their experience to establish their own swine herds.

Woodruff's swine program can count other benefits besides experience and market outlets, too—its enthusiasm and cooperation among members. Perhaps there is no better example than that of Future Farmer William Phillips. Just three weeks before last fall's annual show, the Phillips family lost their home and possessions in a disastrous fire. Luckily, a purebred Berkshire sow Bill was grooming went unharmed. But downhearted, the Future Farmer felt it necessary to approach Woodruff Advisor Arthur Schlock.

"I'm afraid I'm going to have to sell my sow," the FFA'er told Schlock.

Then Jimmy Carlton, a fellow Future Farmer and competitor in the show, offered to care for his friend's 400-pound animal the three weeks until the show.

On the day of the show, Bill Phillips' sow was judged grand champion in the Rotary-sponsored event. Jimmy Carlton, whose hog placed second, knew he was probably helping defeat his own animal by caring for the Phillips animal, but he was first in line to congratulate the winner. "A good Future Farmer," Advisor Schlock remarked.

A decade of experience has taught Woodruff Rotarians that their swine program's "magic triangle" has brought out the winning qualities in both boys and Berkshires.

Bill Gregory, president of the Woodruff Rotary Club, presents 1963 awards to Woodruff Rotary Hog Show winners.

Thanks to Jimmy Carlton, this sow of Bill Phillips, left, won first place in the 1963 Rotary-sponsored FFA hog show.

BUY Your Farm on the Installment Plan

By Fred Hughes

"BUY NOW, pay later" is a familiar phrase among Americans in buying consumer goods. This installment buying principle can be applied to the purchase of farmland, livestock, and machinery, whereby you can enjoy the advantage of immediate ownership while making payment over a period of time.

The usual methods of transferring farmland have been cash sales, mortgages, inheritance, and marriage. A fifth method, little used over the past, is the installment land contract, also referred to as a purchase contract, installment contract, contract for deed, and sales contract.

An installment land contract is simply a written agreement, whereby the seller retains legal title to the farm, selling it on an installment basis to a buyer who takes immediate possession of the farm. The title is not transferred to the buyer until an agreed amount is paid on the purchase price. This amount may be 40 percent of the purchase price, or it may be the entire purchase price.

Why are installment land contracts becoming more popular among farm owners in transferring their land? First, the money necessary to get started in farming is not readily available to young farmers. With most mortgage financing, the young farmer must have 40 to 50 percent of the purchase price in cash. For a $40,000 farm this would require $16,000 to $20,000. Not many young farmers have this much cash in addition to owning their livestock and equipment. Under many land contracts, the down payment is less than 20 percent, and perhaps zero depending on the relationship of buyer and seller.

Most farm renters have difficulty in getting a long-term lease. A year-to-year lease does not provide a young farmer with the incentive to improve or expand his operation. He prefers to buy his own farm to provide more security in his occupation. The down payment of a land contract, which is usually low, will permit him to purchase a farm sooner than on a mortgage.

The increased burden of income, capital gains, and inheritance taxes has also greatly increased interest in land contracts. Large tax gains can often be realized on the sale of a farm by a land contract. If a farm is sold for more than its original cost, plus improvements and less depreciation, a gain subject to income tax is the result. Under federal tax laws, if more than 30 percent of the purchase price is received in the year of the sale, the total gain is considered as income in that year and the tax will be due in a lump sum. If less than 30 percent of the sale price is received in the year of sale, the gain can be spread over the years in which the installment payments are received, usually lowering the total tax.

For example, assume that a husband and wife both over 65 years of age sell you their farm for $35,000. The farm cost them $10,000 and improvements minus depreciation on buildings added another $5,000 to costs. The capital gain would then be $20,000. They have an opportunity to sell the farm on a purchase contract with 10 percent down, or $3,500, and the balance spread over 15 annual payments of $2,100 plus 5 percent interest.

If they had no other source of taxable income except their capital gain and interest, with their double exemption of $1,200 each, they would have paid no tax on the capital gain from the farm sale. However, if they had sold the farm with over a 30 percent down payment, the tax would have been approximately $1,400 on the gain if they had no other income except the interest payment.

The fact that the seller still holds title to the farm provides security in case of default of payment by the buyer. In land contracts, provision is made for seller to automatically reclaim his farm in case of default in payments.

In addition to the advantages listed for the purchase land contract, there are possible dangers to consider. In any purchase involving fixed installments over long periods, there is always the possibility that economic conditions will become less favorable. This is a particular disadvantage to the buyer because he may find it difficult to make his payments. In view of the default clause he may lose his farm, since he usually has not more than 30 to 60 days to make good on defaulted payments.

The buyer is considered the farm owner and must pay taxes, insurance, and maintenance costs just the same as if he had the title to the farm. In periods of low income, the costs added to high principal and interest costs could become a burden on the buyer. It would be sound business for a buyer to set some money in reserve to cover these adverse periods.

The purchase land contract should be in writing and drawn up by a competent attorney. The items that should definitely be included in such a contract could include the following:

a. **The purchase price.**

b. **Amount of the initial down payment.**

c. **Rate of interest.**

d. **Type of repayment plan**—ordinarily it would be well to use standard tables in determining the yearly payment on interest and principal. This will result in a set yearly payment over the period of the contract.

e. **Length of the grace period within which any default can be made good.**

f. **Time at which possession is to be given to the buyer.**

g. **Total time period covered by the contract.**

h. **Pre-payment privilege by the buyer if one is agreed upon.** This provides an opportunity for the buyer to make a few advance payments to guard against defaults in payments.

i. **Conditions under which the buyer may obtain title to the farm.** For example, the seller may agree to transfer title after 50 percent of the principal has been paid by the buyer.

j. **Provision for proper care of the farm buildings and proper land use to protect the seller during the early years of the contract.**

k. **It is wise to specify whether the buyer receives compensation for major improvements if he cannot finish his payments.**

l. **Specify that taxes, insurance, and maintenance are the responsibility of the buyer.**

The buyer should be sure the farm is clear of all liens so that he will receive a clear title when it is transferred to him. Likewise, the seller should check on the buyer's credit rating, his ability as a farmer, and his standing in the community.

Most of the things mentioned above will be taken care of by a competent attorney. Use him as you would your family doctor.

If all precautions are taken when selling a farm on a purchase land contract, there is no reason why it will not be successful. It can provide the young farmer the chance to get started in farming and perpetuate our family farm heritage.

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HAY WAFERS

...A PROGRESS REPORT

From field to bite-sized wafers—hay can now be made without being touched by human hands.

IN SUMMER, 1961, an odd-appearing machine made its way down a hay field on Maryland's historic "Cheston-on-Wye" farm. From a conveyor in the rear, wafers looking like junior's breakfast cereal were spilling into a wagon. Field wafering of hay had come into farm use, and with it a possible revolution in haying in American agriculture.

Field hay wafering has made possible mechanical handling of hay from seeding to feeding. Wafered hay can be cut, conditioned, cured, packaged, loaded, stored, and fed without being touched by human hands. Measuring approximately two by two inches in cubed form, the hay wafers are bite-sized, compressed packages of hay hard enough to be loaded, hauled, and stored without losing shape, yet soft enough to be eaten by livestock. Into this wafer goes all the hay, from stems to leaves with virtually no waste.

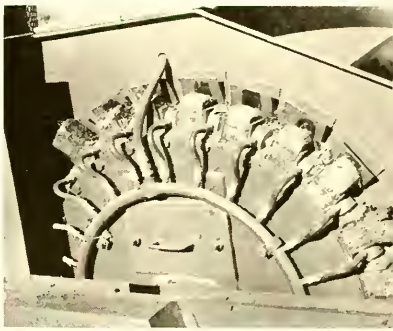
What have been farmers' reactions to wafered hay? One Maryland dairyman increased his butterfat content from 3.8 to 4.1 by feeding wafered hay. When he switched back to bales, the butterfat content dropped back, too. An Arizona rancher placed 66 head of feeder calves on wafers for 61 days. Each steer gained 2.43 pounds per day with a fantastic feed conversion of 8.3 pounds of wafers per pound of gain. In southern California, a dairyman placed 30 head of dairy cattle on hay wafers. They increased production 400 pounds per day over cows not fed wafers.

There are several field hay wafering machines on the market with price tags from $8,000 up to nearly $20,000. The greatest advantage of wafering is the saving of labor. Conventional hay baling may take as many as six handlings, each requiring human labor. Wafering can eliminate hand labor entirely. It can reduce man hours by 25 to 40 percent per ton harvested and tractor hours by nearly the same amount.

Pulled by a three-plow tractor, the wafering machine picks up windrowed hay dried to between 14 and 18 percent, cuts it, rolls it, then forces it under extreme pressure through a set of dies. Cubed wafers are broken off from the continuous stream coming from the dies and taken by conveyor to a wagon behind the machine. Average rate of wafering is about six tons per hour, the wafers requiring only about half the volume of baled hay. The wafers can then be conveyed on elevators much the same as shelled corn.

How do costs compare to baling hay? Studies show that wafering is more costly than baling because of higher first costs, greater power requirements, and a lower hourly capacity. The difference must be made up in reduced labor and added convenience. Baling 3,000 tons of hay a year, and using a $10,000 waferer, it would cost you an average of $1.25 per ton more to wafer hay. With only 1,000 tons a year production, you'd pay $2.06 more per ton to wafer your hay. Even though consumers pay up to a $5.00 premium per ton for wafered hay, you'd have to figure on increased production, reduced waste, and convenience to help pay the difference.

If you plan to handle lots of hay, then wafering might be your revolution. But take a careful study before making the step.



A 500-rpm centrifugal force puts hay through dies, above, on this wafering machine. Wafers break off into palm-sized units, as shown in photo below.

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FUTURE FARMERS TURN FIREMEN

By Paul Weller

In townships covering three counties, Future Farmers worked to protect area farms against the destruction of fire. Their reward was a grateful community and the FFA Foundation's safety award.

FROM Asherville to Scottsville to Simpson, the farmers of north-central Kansas can breathe a bit easier now. Parked in local fire houses are the means to control the fires that for years have raged unchecked through their homes and outbuildings. They have a well-equipped rural fire district, and they can give credit to 17 Future Farmers and their Simpson Chapter advisor, Bob Severance.

The cry of "Fire!" had brought a panicky and helpless feeling to farmers such as George Bell, whose barn burned with all his hay crop; to Rex Borgen, whose barn and cattle shed went up in smoke; or to Jack Jay, whose home and all its furnishings were destroyed in Asherville. Fire was bringing an estimated $30,000 loss annually to rural residents around Simpson, claiming even the scale house of the nearby Asherville Grain Company in a spectacular fire.

But when the alarm went out in February, 1963, that School Board Director Bob Vernon's barn was burning along with his new tractor, Simpson Future Farmers decided it was time to act. They would push aside the traditional small-town rivalry of Simpson and Asherville, knowing now that only through unified cooperation would they be successful in ridding their farms of the menace of fire. There could be no in-between—either they join to control fires, or they stay divided and burn.

The handful of Future Farmers would be the force behind the community's dream of a well-equipped fire protection district, they decided. Immediately, they went into action, meeting with the head of a neighboring rural fire district to get details. Within two weeks, they scheduled the first organizational meeting at Asherville. The community needed details of such a plan, so the county attorney was asked to explain legal aspects, the county clerk was invited to discuss a possible tax levy, and Bob Chestnut agreed to speak on his neighboring fire district.

But farmers were leary of such a venture, and only four showed up at Asherville that February night. Undaunted, Simpson FFA members called a second meeting two nights later in Simpson with the same program. This time the idea caught fire, and over 30 farmers filled the room. Before the program was completed, a 10-man committee had been formed to meet still another night to get the ball rolling. Fred Hirsch, Charles Melton, and Marvin Prochaska were appointed to act as the official board. Two of the three had Future Farmers in their families.

The following Monday evening, the group met to draw up boundaries of the fire district, attempting to keep them within 10 miles of the planned-for fire trucks. At the same time, Future Farm-

The Simpson Chapter, all 17 members, proudly pose in front of their district's new fire trucks. Advisor Bob Severance is at right, outfitter Otto Trion, left.

Kansas Farmer Photos

A new concrete block fire house with a metal roof houses the new truck at the community of Asherville. "Community Progress Through Unity" is FFA's story.

ers were publicizing the fire district idea. They were attending civic clubs, local 4-H meetings, and sending releases to area newspapers. They were explaining their plans to all who would listen.

Next step was a detailed brochure sent to the 217 rural families within the 135-square-mile area planned as the rural fire district. For the first time, farmers could study the plans, taxes they could expect, and equipment needed—all in the quiet of their homes. They could learn that their 17 Future Farmer neighbors were promoting a plan to protect rural property assessed at over 4 million dollars.

County Attorney Thomas Conroy informed Simpson Future Farmers that they must circulate a petition to all legal landowners in the proposed district. At least 51 percent of the farmers would need to sign the petition to put the FFA's fire district into effect. Future Farmers went into a "crash program" to take the petition to each farmer. They even went through the farm deeds of the entire district to get exact signatures necessary to make the petition legally correct. In only two days, FFA members collected 83.4 percent of the farmers involved. Their plan had been approved and the petition completed—all within 90 days of Farmer Vernon's barn fire in February.

"Joint Rural Fire District No. 1" was established on April 24, 1963, and included parts of Mitchell, Cloud, and Ottawa Counties, Kansas. In fact, it included 176 square miles and three towns. On a total tax-raised budget of $20,000, the fire board went ahead with plans for fire trucks, fire halls, and training for the local volunteers.

Two new 2½-ton trucks, equipped with 650-gallon tanks, pumps, ladders, and hose, were ordered, and three surplus forestry fire trucks destined for the district were planned. Volunteer labor helped build fire halls for the trucks, and a call to the state fire prevention staff brought a staff member to Beloit to train the willing volunteers. The three departments making up the district organized a chief and 12 firemen, with the men living closest to the fire halls making up the nucleus of each crew. Future Farmers made the rounds again, this time recording each farmer's water supply, roads, and buildings on index cards for instant reference in case of fire.

From Scottsville south to Eureka Township, farmers are now reassured each time they pass the buildings with "fire station" lettered on them. Inside is fire protection equipment on the ready, outside is a sign "Community Progress Through Unity," and on farms in the district are Simpson Future Farmers who made it possible.

Farrowing House Communications

By Lorraine Hoelzer

PERHAPS THE most unusual sounds ever heard over an intercom system come over the one in Leslie Barker's bedroom.

Leslie, a 19-year-old Future Farmer from Sulphur, Louisiana, has been an FFA member for the past three years. His program of raising registered Yorkshire hogs, with frequent visits and advice from his advisor, James Borque, is proving to be a most profitable enterprise.

Recently, Leslie installed an intercom system from his bedroom to the farrowing house to save steps and time. Since then, the intercom has become a very convenient item to have on the farm where this long, lanky, black-haired youth has to spend much of his time in the farrowing house with up to 40 to 50 pigs.

Leslie listens to some fatherly advice over intercom for a pig's skinned ear.

Because of the distance between the house and the farrowing stalls, many steps were necessary to the phone or to the house. Now the master set, which has a push-to-talk switch, is located in Leslie's bedroom over his desk, with a remote set in the farrowing house. With this setup, it is a simple matter to call or talk with Leslie while he is working outside.

The intercom over his desk keeps Leslie informed while working on records.

The Tower intercom system with its two-station set has a 500-foot range. It was purchased from a local department store for $23.00, and Leslie and his father installed it.

Several times in the past, Leslie has found it necessary to call the veterinarian. All he needs to do is ask his mother over the intercom to call the doctor for him. If the doctor is unable to come when called, he gives medical instructions to Leslie's mother and she repeats them to Leslie over the intercom. This prevents the necessity of Leslie's having to leave the farrowing house.

The Future Farmer has nine brood sows, keeping him busy at farrowing time. With the new intercom installed in his bedroom permitting him to hear every sound in the farrowing house at all hours of the night, Leslie can keep a close check. At night while he is studying, he can check on the pigs by flipping a switch.

Near the back door, Leslie has an electric horn similar to the type used on warning systems. It serves as a call when he is working in the field.

Leslie and his parents agree that an intercom system may be an unusual device for a hog farm, but it is a step saver. It means more time for chores and less spent in running to and from the farrowing house.

The A B C's of FARM INSURANCE

As a beginning farmer, you will find insurance to be one of your most important investments. Here's your guide to a safer future.

By

Charles Ocker

IT WOULD be reckless today for a young man to raise a family, buy a farm, drive his car, build a new barn, or just plain live without insurance. In many states you can't even drive a car unless you have at least automobile liability insurance. When you buy a farm, chances are the lender will make sure that you plan to insure the buildings adequately with fire and windstorm insurance before allowing you to close the sale. Insurance has become so much a part of our lives that every young farmer needs to know how insurance can help him guard against financial loss.

As the future head of a farm family, you'll want to look into your needs for life, liability, and property insurance. Most experts agree that these needs should be taken care of first. Then you should consider having at least limited protection against accident and health expenses, total disability, and crop losses.

The most serious risk a farm family faces is the death of the breadwinner. Management usually comes to a halt, income stops, and with added labor costs the family often has to sell out. For this reason, every young farmer needs to invest in life insurance. You owe it to your family! Life insurance is available in three forms: term, ordinary life, and endowment insurance. Each has its advantages as well as disadvantages. A good life insurance agent can guide you in selecting the best type for your particular situation.

Term insurance will provide you the most protection for the lowest premium cost now. But it always has an expiration period when the protection will run out—usually five or 10 years. Premiums are based on your age when the policy is written. Each time the policy is renewed, the same amount of protection will cost you more. Most companies will not renew policies after you reach 55 or 60. Even if they did, the cost would be prohibitive. Term insurance has no cash or loan value. It is pure protection against your loss of life. If you decide to buy this type of insurance, it's a good idea to buy a policy that can be converted to a permanent plan sometime in the future when your income will be greater.

Ordinary life is the most popular type of permanent insurance. Unlike term, it has cash value in addition to giving your family a specified sum of money in the event of your death. With an ordinary life policy, your premiums will always remain the same. Although they will be higher than for a term policy, the additional premium cost will build an ever increasing cash equity that you may borrow if you need extra funds; yet your insurance protection remains in effect. Over the years, ordinary life offers the lowest net cost of any policy on the market.

Endowment insurance emphasizes the savings features more than protection. It is also written for a specified period of time, often 15 or 20 years. At the end of the period, you may take the full amount of the policy in cash or as a monthly income. The premium rates are higher than for any other policy. As a result, cash values build rapidly. Like most farmers, however, you will probably find it more profitable to invest your money into your farm rather than a policy of this type. Nearly three fourths of an endowment premium goes for savings rather than protection.

You will want to ask your agent about extra features that can be added to your life insurance policy. Waiver of premium assures you that your premiums will be paid for by the company should you become totally disabled. An accidental death benefit clause provides that your family would receive double or even triple the face amount of your policy if you met an accidental death. Guaranteed insurability is a relatively new life insurance extra. When added to your new policy, it simply guarantees you the right to purchase up to six or seven times the face amount of your policy at specified future dates, even though you may have lost your good health and would otherwise be uninsurable.

Referring to family protection as well as retirement income, don't forget about your social security benefits. You will pay for them each year when you file your income tax return at the current rate of 5.4 percent of all your income up to $4,800. If you continue to pay on this maximum amount, you and your wife would receive a $190 monthly income at age 65. Should you die before that time, your family could receive up to $254 a month until the children reach age 18. At age 65, your widow would again start receiving a monthly income.

You'll need farm liability insurance by all means. It protects you against legal liability for death or injury of someone on your farm, as well as pays for damage one of your animals might do to a neighbor's property. If someone helping you pick corn loses his arm in the picker, even through his own carelessness, he can sue you for thousands of dollars. If a visitor to your farm falls and breaks his leg, you can be sued for his injuries and loss of work.

Many insurance companies have "package policies" that include protection against bodily injury, property damage, and medical expenses. The policy would pay up to its stated maximum for injuries incurred on your farm, for damages to others' property by your hired men or animals, and for medical expenses for persons injured on your farm. Before taking out such a policy, however, it's always a good idea to check its costs against individual policies offering the same coverage.

An extremely important policy to you as a farm owner will be your "property damage" contract. It gives you protection against fire and lightning, which can cause serious financial loss. Onto this fire policy, you can add an "extended coverage" rider to protect against damage from vehicles, explosions, wind, aircraft, hail, and smoke. The cost of this extended coverage rider is about one half the cost of your fire policy and is well worth the money. Make sure your property is insured for its replacement value, if at all possible.

There are many types and variations of farm insurance coverage, and each young farmer should check with an experienced insurance representative for details. It's your personal obligation to yourself, your family, and your future.

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Sam and Dan Leighty in a familiar setting in their milk house. Their sanitation program is the envy of the valley.

Dairy pellets come through chutes to cows in the milking parlor. Sam gets ready for action at milking time.

Sam and Advisor Luther Lalum study the latest reports from the DHIA testing center. Both twins work to improve their dairy records.

Montana Dairy Twins

Identical twins, Future Farmers Dan and Sam Leighty overcame their non-farm backgrounds to buy a dairy farm and win a joint FFA award.

DAIRYING has become a way of life for Montana's FFA dairy twins, Sam and Dan Leighty. In all of the Flathead Valley around Kalispell, the Future Farmers and their dairy herd are known for superior records in sanitation and production, not to mention the close cooperation of inseparable twins.

For the Leightys, the road has gone from a suburban house just outside Kalispell, through four years of vo-ag and FFA, to their own $56,000 dairy farm 10 miles east of town. From a combined inventory of five cows and calves, two market hogs, two motor bikes, and one horse when they enrolled in vo-ag back in 1958, Dan and Sam have planned and farmed their way to becoming Star Farmers of Montana—a joint award earned by joint work and records.

Having no farm of their own did not hinder the Leighty twins in getting established in farming. Beginning with summer work on the Flathead Chapter's farm as Green Hands, they began to get practical farm experience. From here, the two went to work on their grandfather's dairy farm near town. On weekends and during summers of vo-ag, the twins learned to milk, clean and sanitize dairy utensils, plan dairy rations, and practice artificial breeding. They had found their careers and began to plan for the future.

"They chose dairying because of their interest and love for that type of work," their advisor, Luther Lalum, explained. "This has been proven by their devotion to the operation."

In the four years of high school vo-ag, Sam and Dan saved $3,000 from the combined farming programs. In the meantime, Sam went away for a short course at Montana State College to learn artificial insemination. By graduation in 1962, the twins were ready to make their move toward their own farm. The most likely farm was their own grandfather's, the one on which they had gotten their dairying experience.

The 160-acre farm was located in the Flathead Valley on some of Montana's best farming land. There were 23 dairy animals, a full line of machinery, and an irrigation system. The asking price was $56,000, but Sam and Dan were determined to raise the money.

Borrowing $6,000 that their father had saved for possible use in college and adding their own $3,000, the twins paid a $9,000 down payment. A contract was signed obligating them to $200 a month until the farm was paid off. It was April 1, 1962, and Dan and Sam Leighty were in the dairy business as partners. As Dan put it then, "Because we are twins, we have done everything together. Therefore, it would be impractical to begin separately now."

With characteristic combined effort, the twins pitched in to improve the farm. They built a loafing shed for the dairy animals, installed a bulk cooling tank to hold their milk, increased their herd to 36 cows, and converted to pellet feeding of grain. The two cleared two acres of brush out in the irrigated fields, started a fertilizer program, bought another house to be moved onto the farm since Sam got married recently, and spent additional time reorganizing their replacement program for heifers. In a short time, it was hard to recognize the old dairy farm.

Using his artificial inseminator's license, Sam became an inseminator in the Flathead Valley and during 1962 artificially bred over 800 cows in the surrounding valley. Back home, using semen from the Evergreen Northwest Breeders' Association, he continued to improve the dairy herd.

So successful were the twins in building and improving their dairy operation that last March the state livestock inspector gave their dairy a sanitation rating of 90 percent, the highest in all Flathead Valley. But their most coveted award came a month later in April, 1963, when they were named joint Star Farmers of Montana at the FFA's leadership conference at Bozeman.

Cooperation, determination, and a love for dairying form the story behind Sam and Dan Leighty's success as dairy twins. "The glorious sunlight of brotherhood and cooperation," the Official FFA Manual calls it.

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"WE HAVE more national Foundation award winners and sons of American Farmers . . . in those officers than our national organization, I believe, has ever had before," Nels Ackerson told a Chicago meeting recently. He was referring to his fellow FFA officers, four of whom we present here through a "back-home-on-the-farm" view.

FFA's

By Paul Weller

YOUR national FFA vice presidents are the FFA's student representatives in their respective regions. From state convention to countless farm meetings, they describe and promote the FFA and you. Coming from mountain farm and rolling prairie, they are James Teets of West Virginia; Jan Turner, Utah; Marvin Gibson from Tennessee; and Joe Coyne of Illinois.

Joe Coyne improved this rented land to grow a top corn crop the first year.

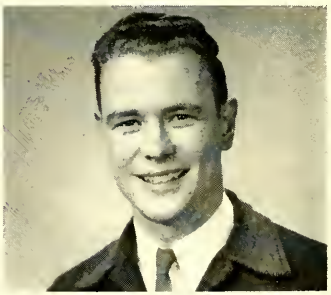
Joe Coyne brought academic excellence and top farming know-how to his position as national vice president of the Central Region. From the straight "A" average in his college studies to the 450 acres of Illinois soil he helps farm 13 miles west of Joliet, his record as a Future Farmer is the envy of many.

When Joe joined the FFA in 1958, he started raising purebred sheep in partnership with his brother. His previous sheep and laying hen enterprises had been unprofitable, so Joe worked hard to make his new farming program a success. On the 450 acres, part of which he and his father rent, Joe began raising oats, soybeans, and corn. In 1959, he rented a nearby 80-acre farm and produced 74 bushels of corn, despite the advice of a specialist who told him it was good for nothing but wildlife.

In 1961, he rented an additional 160 acres and expanded the sheep flock to 53 head. Ten percent of the 50-head beef herd was his before he journeyed off to nearby Joliet Junior College, as was a certificate proclaiming him valedictorian of his high school class.

Joe Coyne never slowed up in his FFA and farming activities. By 1962, he was state FFA vice president. Star State Farmer, a member of the state and national FFA bands, and was still helping farm the three farms with 113 feeder pigs, 12 ewes, 50 head of feeder cattle, and nearly 200 acres of crops. All the while, he was earning straight "A's" at college.

When his dream of becoming a national FFA officer was realized this past fall, Joe added another win to his record. Now it'll be more college and a degree in agriculture.



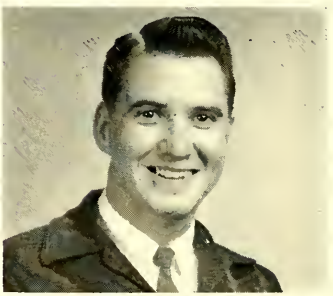
At age five, Marvin bought this Angus calf. It was his beginning in farming.

Marvin Gibson, vice president of the FFA's Southern Region, came into his own farming enterprise at the tender age of five, when he and his older brother pooled their resources to buy a beef heifer. On the family farm near Maryville, Tennessee, Marvin began raising beef cattle for show and sale in the Smokey Mountain community.

Inspired by his older brother's achievements in the FFA, Marvin vowed to try his hardest when he entered the FFA in 1957. By this time, he had three steers, plus part of the farm in wheat and sweet corn. As a freshman, the Future Farmer traveled west to the National FFA Convention, saw the work of the national officers, and vowed he too would be one. To do it, he would participate in everything possible back at the Everett Chapter.

At graduation from high school in 1961, Marvin had a one-third interest in the family farm of wheat, oats, pasture, tobacco, beef feeders, and dairy animals. Out of eight fat cattle shows, Marvin won six grand championships and two reserve championships. One of the steers sold for $2.17 a pound, while another brought $2.15. It was beef on which Marvin had placed most of his farming emphasis.

For four years, the determined Future Farmer entered the FFA public speaking contest. After three defeats, he went on to win the National Public Speaking



honors in the fall of 1961. Still working hard on his leadership activities, Marvin entered Carson-Newman College that fall to begin studies toward the rural ministry. His election to national office this past fall interrupted his college studies and came at his sixth National FFA Convention.

Between FFA duties and college, Marvin farms the family farm, his father supplying the equipment and Marvin furnishing all labor for one third of the net profit. College graduation will find him working in his native South.

National Vice Presidents

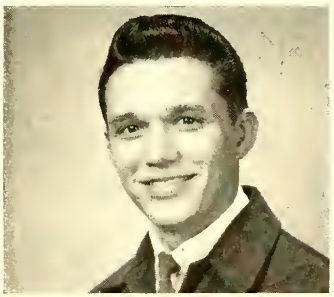
James Teets started actively farming before he was 10 years old with a red wagon, 200 layers, and a $200 loan from the local bank. His interests in poultry had always been strong on the home farm near Terra Alta, in West Virginia's Preston County. At the age of nine, the now national vice president of the FFA's North Atlantic Region started a weekly egg route by wagon to sell his own eggs.

By enrollment in the FFA in 1958, Jim Teets had gathered a herd of 12 Angus beef animals, 350 layers, and a partnership on the family's flock of sheep. That same year, he helped build a larger laying house, install egg coolers, and build the family flock to 6,000 birds. Graded eggs and printed egg cartons put the Teets family in the retail egg business.

Jim Teet's senior year in high school brought results from his hard work in the FFA. After receiving his State Farmer Degree, he was elected state FFA treasurer, named State Star Poultry Farmer, Star Poultry Boy of NEPPCO, and Star State Farmer. Later at the National Convention while a member of the FFA Band, he became Star Poultry Farmer for his region.

Today the 120 acres of rolling farmland has 3,000 laying hens, 280 sheep, a dozen beef animals, and hay and pasture. For Jim and his ex-FFA advisor father, the beef and layers are an important part of the farm. A livestock show and sale barn keep them busy, in addition. On a scholarship at West Virginia University, Jim Teets plans to return there next fall, then on to an agricultural career.

Leghorn layers and champion beef are the backbone of Jim Teets's program.

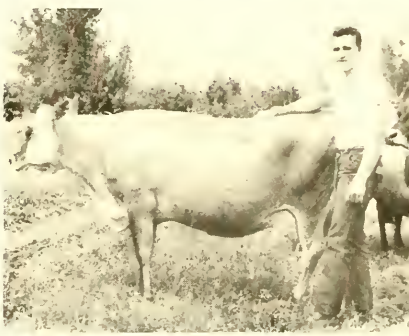


Jan Turner and dairying have been steady companions since that day 10 years ago when he and "Linda," his very first calf, got acquainted. He sensed the opportunity the FFA offered him even in his freshman year and studied all material he could muster on agriculture and its problems. As a Green Hand, he was the proud owner of six dairy animals and several acres of potatoes and barley.

In the Utah valley near Morgan, Jan and his parents were facing increasing problems from urbanization. The 120 acres they farmed was being surrounded by homes, and land was selling for from $1,500 to $4,000 per acre. It became increasingly harder for the Turners to farm land worth so much in the short Utah growing season.

By going into partnership with his father on the farm and Jersey cattle, Jan helped consolidate and intensify the farm. He helped reorganize corrals and feeding areas to handle an additional 20 dairy animals. The number of dairy animals was increased to 95, and a nearby wooded river bottom was cleared for livestock. It was a struggle to increase production without passing the saturation point.

All the while, the future national vice president of the Pacific Region was setting high goals in school. He entered FFA public speaking and as a ninth grade Green Hand, won third place in the state. His love for the farm helped him build a farming program to include wheat, corn, potatoes, alfalfa, and grain, besides his dairy animals. By his senior year in high school, he had held three chapter offices and had been a state officer for two years. A year later he was named Star Dairy Farmer of America at Waterloo, Iowa.



Jan Turner and "Linda," his first heifer, started in farming together in 1954.

With over a year of college at Utah State University behind him, Jan is looking forward to finishing college and returning to his farm partnership. A Golden Gloves boxing contender and the holder of five college scholarships, Jan Turner's future in farming is brighter than ever.

TAKE ANOTHER LOOK!

Before you decide your farming operation won't allow you to go to college, take another look . . .

By
Larry Pearson

I ALMOST gave up going to college because I didn't see how Dad could manage without my help after school and on weekends. Then we took another look. The fact that I am graduating from college this spring proves how well our new idea worked.

I wanted desperately to go to college after high school. Still, our 200-acre dairy-hog farm was planned so that it took all hands and the cook to keep it operating smoothly. As the summer began and it became time to apply for college, we really concentrated on our problem. With younger children in the family, plus the added expense of tuition, it was silly to even suggest cutting down on cows or hogs. It was equally foolish to suppose that Dad could afford all the new labor-saving machines on the market. We would have to stay within the budget.

An FFA tour through a large feed plant had pointed out that leaks in either time or energy could make the difference between profit and loss. That's when I got the idea that served as my steppingstone to college. "Let's analyze every step, every move we make doing routine chores, Dad," I suggested. He caught on fast. "Good! We'll look at the old place like we never saw it before," he grinned.

Then we got down to work, keeping a pad and pencil handy so we wouldn't forget. We paid special attention to the placement of feed bins, equipment—anything we handled or made a trip for. As we thought of improvements or short cuts, we wrote them down. By the end of a week we had a long list and already had made some changes that would become permanent.

First, we took down a partition in the barn that had served no purpose since tractors replaced old Dobbin. With the partition removed, calves could be fed without walking around the end and through a door. This saved 25 steps. Not much? Multiply it by two, since chores are done twice a day, and then by 365. We tore out calf pens and put in small stanchions, far easier to clean for one man since now the barn cleaner could take over.

Instead of unloading most of the feed at the granary, we built feed bins wherever any livestock was to be fed. Here in Minnesota, regular water taps freeze solid during the winter months. Installing self-draining hydrants cost a little more but eliminated carrying what amounted to tons of water to hogs in the course of one winter.

The more we analyzed, the more we found culprits that had robbed us of profit. An extra hay chute saved dragging bales many extra feet. We made loading cattle and hogs a one-man operation by building a ramp on wheels that was exactly the height of the truck. An economical pole-type building for the young stock cut their care in half.

It is next to impossible to see all of your work with completely neutral eyes. That's why we wanted Mr. Reynolds, my advisor, to look over the situation. He hadn't been on the farm 10 minutes before he noticed our hogs didn't have a concrete feeding slab. He pointed out that the feed saved from being trampled into the mud in a single year would pay for it. What was saved the next year could be used for tuition. Economical, homemade self-feeders were another one of Mr. Reynold's ideas—feeders that allow one man to feed many hogs.

Any Future Farmer knows of the long hours of vigil spent in the hog barn at farrowing time. Mr. Reynolds sold Dad on the use of farrowing crates. Dad could hardly believe that it wouldn't be necessary for him to be on hand to put piglets under a heat lamp or keep the sow from trampling them. But it's true. A few days with a hammer and we had several crates ready. With a heat lamp to warm the baby pigs and the crate constructed to prevent the sow from getting up, Dad wasn't needed.

Naturally, all time and labor savers on one farm won't apply to another farm's operation, since there are no two alike. But big companies have used this means of increasing efficiency without increasing time or labor for years. They even employ full-time people to watch for time and energy leaks in the company.

Unless I miss my guess, you'll find both your advisor and county agent willing and able to help. The main object is to reduce work without making less profit. You'll likely find, as we did, that with increased efficiency the margin of profit widened a bit.

You'll have to look around, speculate, and analyze your own farm. I know that after four years, our system is still working out well enough that I will soon get a degree in science. Dad has managed, except for a minimum of hired help, by planning the big jobs to coincide with my college breaks and vacations.

Don't give up a college education without taking another look.

♦♦♦

Posing proudly in his college jacket, Larry Pearson makes a contented pose.

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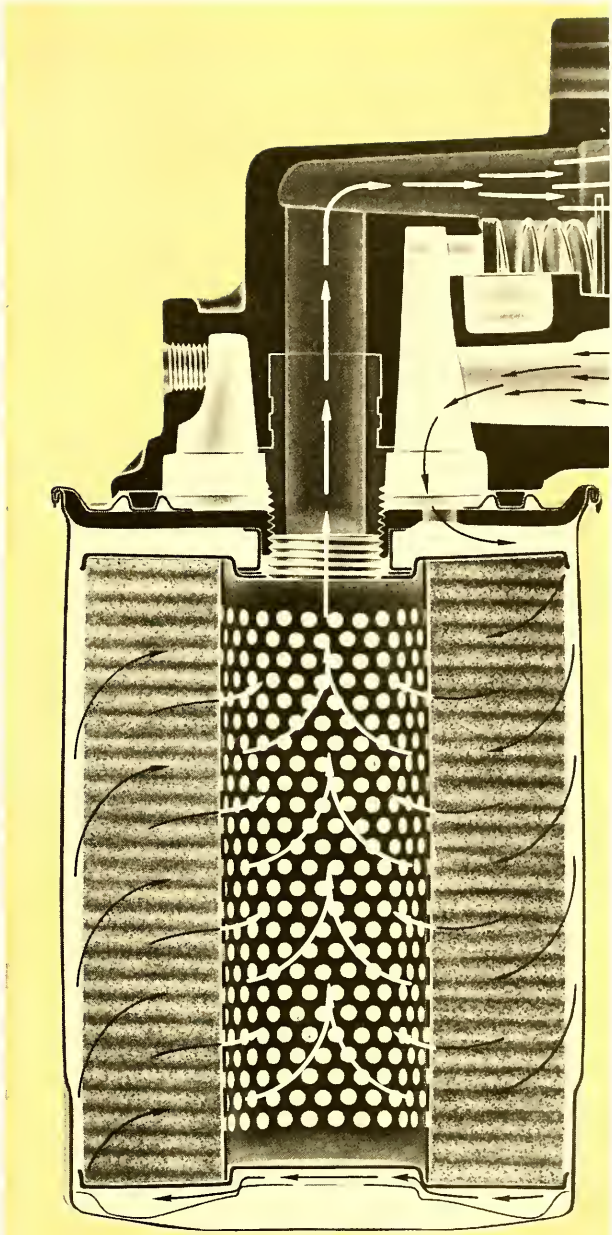

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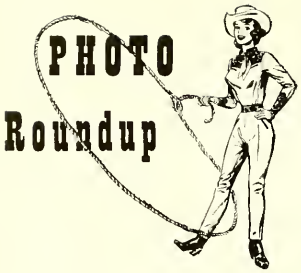


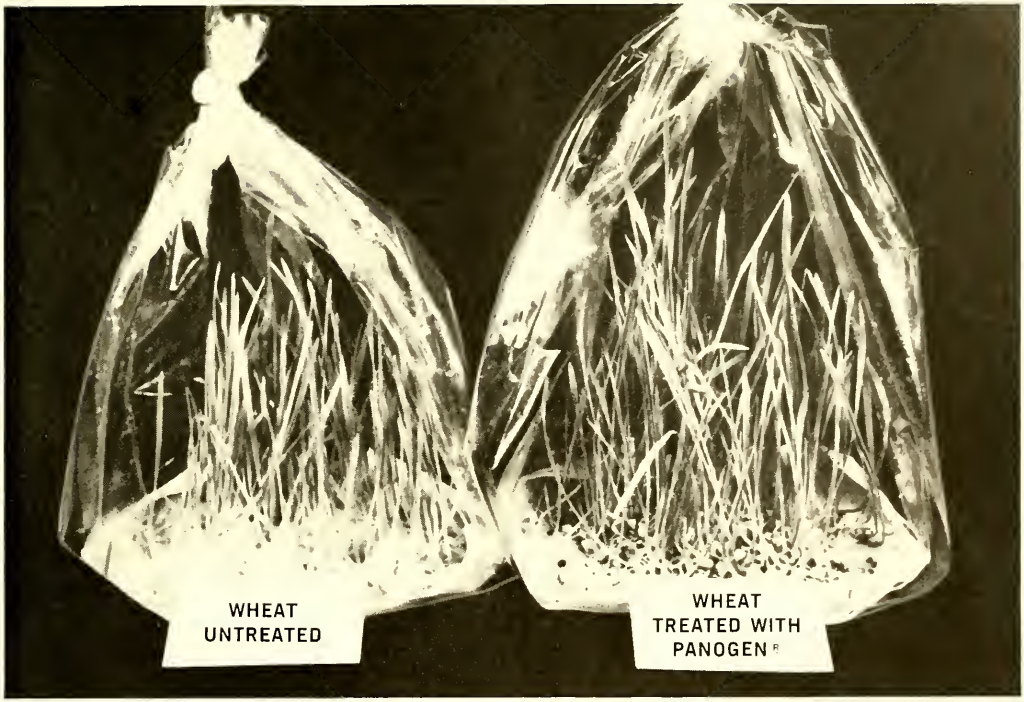
A visit to Senator Byrd's office in Washington was part of Nels Ackerson's official duties recently promoting the safe use of pesticides. Teaming up with 4-H Representative Katherine Roche, right, the two visited on Capitol Hill and also with agricultural chemicals officials.

The working garb of the steel mill became familiar to the national FFA officers as they toured U. S. Steel's works at Pittsburgh, Pennsylvania, on the FFA's Goodwill Tour.

Milk is being introduced in soda pop bottles in Minnesota this spring. The state's "Princess Kay of the Milky Way" teamed up with FFA officers to begin FFA Week promotion.

"Elaine," Duaine Moore's prize Angus cow on the right, has produced five heifer calves in three years, and two have been grand champions. The Morton, Mississippi, Future Farmer, right, holds Elaine and her oldest calf, while his advisors, Kenny Gray and I. Q. Weaver, hold the twins. Duaine's father is at rear.

Bill Robinson, president of the Warren, Illinois, Chapter, discusses seat belt installation with Bob Shimmin. The chapter helps local police install the belts.



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The plastic bag test visually proves the benefits of treating seed with Vapor Action Panogen—the world's most widely-used, most thoroughly-proven seed treatment. Through the clear plastic bags, you can see the black and gray disease molds form and spread to kill and weaken seeds. You can also see the clean, healthy look of the Panogen-treated seeds... their absence of mold... and their superior root and foliage development.

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The Big Trek

By ***Maurice Moyal***

Through high mountain passes and almost impassable trails, thousands of sheep are herded annually to summer pastures in Europe's mile-high Alps. Our true story follows French shepherds in their spring battle against the elements.—Ed.

FOR JEAN Chemin, a sheep farmer from southern France, summer ushers in the yearly trek that takes his flock of 2,300 sheep and goats from the sea level grazings of La Crau Plain, blighted by the drought, to the lush Mercantour Range 200 miles away and over 8,000 feet up in the French Alps, bordering on Italy.

Toward the end of spring, the sheep get leaner and leaner. Their flat, scissor-like jaws scrape the lowland pastures bare, upturning every pebble in their search for the last withered blade of grass. As La Crau burns under a fiery sun, they begin to suffer from the heat.

Despite his eagerness to start, Chemin has to wait for the thaw to set in on the Alps—the flock might not survive a late snowstorm catching them on some treacherous mountain pass two miles above sea level. At such altitudes spring replaces winter overnight. But when they reached journey's end, a tall carpet of succulent herbs would await them.

Chemin and his three drovers would have to spend many months away from population centers. So, he used the last days to complete meticulous preparations for his expedition. Into a covered wagon he heaped everything needed by people remote from civilization.

There were thread and needles; sheep medicines and extra clothing; coffee and sugar; codfish boxes and oat sacks for the good old mare; and considerably more than a baker's dozen of other oddments.

Oversight of the most trivial thing would mean for someone a long hike down dales and up mountains to Bouzieyas hamlet, 10 miles from his shepherds' cabin, nestled in the shadow of 8,396-foot Cime du Voga.

With camera man Marcel Coen, I joined Chemin at St. Martin de Crau, a village near Marseilles, when newspapers announced, "Thaw on the Alps!"

Because the animals must be slowly acclimated to the freezing cold of the mountain heights, the journey would be made in 13 marches, each of 15 miles. To evade the scorching heat of the day, the flock would travel mainly after dark. Thus, at 7 p.m. on the first day of summer, 67-year-old chief shepherd, Bastian, set the animals on their trek with the formula: "Brrrrr, veni, veni, pitchounes!" (Now, move along, little ones!)

Accompanied by his dog, Lamir, he would lead the way, keeping the pace at a steady mile and a half per hour. He warned me that such a slow gait, best for the flock, would be hard on me because it is tiring to cut the length of one's pace in half.

In the middle of the flock, Shepherds Francois and Simon urged their dogs to start prodding the sheep in a top-kick's bark: "Garcon, Tambour, Brillant, Marquise, jappe, jappe, couquines!" (Bark, bark, you rascals!)

Bringing up the rear with the steady mare, La Grise, trained to stop automatically as soon as the sheep showed the slightest hesitation, Chemin set the rear in motion.

Under the sun's slanting rays, the whole flock, enveloped in dense clouds of dust, went tramping forward to the merry accompaniment of their neck bells. Each sheepmaster chooses his

(Continued on Page 36)

A MESSAGE TO CAR BUFFS –

DON'T JOIN THE ARMY UNLESS

unless your idea of what is important in a car is what's under the hood and you want a chance to work on something besides ordinary V-8's and straight 6's. (The Army has the largest variety of vehicles available anywhere.)

unless you want experience in the booming fields of aircraft and missile maintenance. (The Army has the third largest assemblage of aircraft in the world.)

unless you want to work on the most up-to-date equipment around. In addition to all the things you would expect, the Army now uses giant-wheeled land trains in Arctic regions... trucks that swim... tanks that go underwater... things that ride on cushions of air.

unless you're willing to work hard to become a real expert... and learn skills for which you'll be paid as an expert.

unless travel, adventure, and responsibility appeal to you. You'll get all three in the new action Army. Today's soldiers serve in almost every country in the free world.

If this sounds like what you're after, talk with your local Army recruiter. Ask him to tell you how the Army can help you to become the expert in the specialty of your choice.

But don't wait too long. There's a limited quota at every Army school; and the sooner you apply, the sooner you can be on your way.

If you're good enough to get in...a proud future can be yours in the new action

Army

The Big Trek

(Continued from Page 34)

bells so that their harmony blends in a chime peculiar to his own flock. Thus, an expert, even a long way off, can identify by ear a flock on the move! During the whole drive, that sets the rhythm of life in the flock.

We marched all that night. Towards 3 a.m., the blacker outlines of a farmhouse emerged from the graying darkness. We were at La Samatane, our first halting place.

The limited amount of grazing the sheep do on the move is not sufficient to sustain them. Now and then Chemin had to provide them with a square meal off some rented meadow. Our sheep would start grazing in a single mass. Their tongues swept the widest section of grass possible, which their thin lips impatiently chiseled away. When their appetites had been blunted, they would scatter away in several groups.

After a time, I grew aware that it was always the same number of groups.

"Are the groups made up of the same animals?" I asked Bastian.

"Indeed they are. Each one is a family grouped around the grandmother ewe!"

As the road struggled upward along the left bank of the Durance River, we passed from Lower Province into the Alps area at Mirabeau Pass. Our sheep were getting hardier and hardier. At dawn they could graze with no ill effects on grass heavy with dew, which would have harmed them in La Crau.

Before tackling the first high mountain passes, we rested for a day at Oraison. You could pick out heights more formidable than the lesser Alps chain already passed. Lit by the rising sun, the eternal snows appeared dazzling white and pink on the Lure Mountains.

It fell to the shepherd of the watch to prepare our meals. Cook would pour beans, macaroni, whole potatoes, chunks of bread soaked in olive oil, and some sharp red wine into a big kettle filled with boiling water.

Only a ravenous appetite, the open air, and 15 miles on your tired legs could induce you to care for it. And as Jean put it, "Br'er, it's some grub to have inside you!"

As our procession wound higher and higher along the valleys of the Verdon over traffic-jammed highways, mountain tops, and snowdrifts, some sheep were found limping. Their hoofs had gotten chinked by quick and brutal successions of heat and cold. Those too exhausted were put in the back compartment of the wagon.

Winding their way through snow-splotched mountain foothills, French shepherds and their dogs herd the vast flock up to the 8,000-ft. pastures near Italy's border.

Drugged with fatigue, I had become an automaton. At night, I would hold onto a shaft of the wagon. As my legs kept mechanically knitting ever onward, now and then I'd fall into a doze. But pronto, a painful bump against mare or vehicle would jolt me awake.

Before tackling the final ascent, we recuperated for 24 hours at Bayasse, a hamlet at the foot of the 8,696-foot Restefond Pass. The sheep must eat their fill. If they were to cover the last stretch hungry, they might climb over the steepest rock in search of grass—and fall to their death.

The wagon was left behind in a shed, and its cargo was transferred into pack saddles. Along this last stretch, often shrouded in mist, the mules were to lead the way. Once a mule has traversed a winding mountain track, he'll remember its bends forever.

We climbed over 3,000 feet across a landscape strewn with tumbled rock and snow patches. The air was loaded with electricity, and the animals began showing nervousness as the top of the pass disappeared in clouds. We reached the relative safety of the strategic road, cutting across it as hailstones began lashing painfully at the animals' muzzles. They lowered their heads and stopped. We began thrashing them to have them scatter away, but in vain.

With a blinding crash, lightning struck the top of the pass a few feet above our heads, darting a blue tongue of flame along the wake of warm air created by the sheep. Scared out of their lives, they scattered like chaff in the wind.

Marcel and I ran like mad to round up the terror-stricken animals, at the risk of falling over some precipice concealed in fog. Suddenly the north wind started blowing wickedly, clearing the fog away. Soon the bells of the leaders began echoing together, recalling the scattered ewes.

Everybody was wondering—how many casualties? The previous year on the same pass, a shepherd and 345 sheep had been killed by lightning.

I thought the ordeal would be over with the end of the gruelling climb. But along a steeply descending track turned by the storm into a muddy torrent, the descent to the Camp des Fourbes pastures, 1,500 feet below the pass, was a trying experience.

At last, we emerged into a vast circus of mountains, topped by the dazzling whiteness of eternal snows. At midslope I could see three small cabins. The largest was the drovers' cabin; the remaining two, the stables for the pack animals. Sheep and goats had to be content with an open-air corral nearby.

Sheep and goats had already hurled themselves upon the rich grass, ever living the present moment without fright and without memory, although we might have had many casualties by the mountainside. Such is the way of the big trek and the forgetfulness of animals and, for all I know, their overpowering wisdom. ◆◆◆

On safari in Tanganyika, professional hunter Ommanney holds a Winchester slide-action 22—one of three new 22 models he tested.

"How did I get to be a professional hunter? I guess it all began with a Winchester 22,"

says David Ommanney, our man in Africa.

When we took our new rifles to Tanganyika, to prove them on safari, it was David Ommanney we chose to lead us.

Masai warrior who visited our camp learns to aim with new lever-action 22.

Few men know more about game and guns than Ommanney. And no professional hunter in East Africa is better liked and respected.

Our three 22 models were among the new rifles he helped test. "The ruggedness and accuracy of these hard-hitting rifles is amazing," Ommanney said.

But it was what he said about his long experience with Winchester 22s that we wish all young hunters (and their parents) could have heard.

"I was just a kid," he told us, "when I owned my first one. And no rifle I've handled since had so much to do with deciding my career.

"It wasn't simply that I learned from it how to aim and squeeze a trigger. My first 22 taught me most of the things a true hunter must feel in his bones.

"Things like showing respect for his rifle—by always handling it safely, and never failing to keep it clean and in perfect shape.

"Things like always being fair to the game he hunts—by never firing at anything until he's pretty sure a single shot will drop it."

Give muscle to your 22. Be sure you ask for Winchester or Western rimfire ammo.

Semi-automatic rifle Model 290, $52.95.

Lever-action rifle Model 250, $56.95.

Slide-action rifle Model 270, $55.95.
(*With brown Cycolac forearm, $52.95.*)

To this day, David Ommanney is never without a Winchester 22 in the rack of his Land-Rover. "It's a *real* rifle," he says. "And belongs in the safari battery."

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Alexandria, Va. 22306

DAIRY COWS on *Slotted Floors*

By Ivan Bigalow

Now slotted floors are being introduced to the nation's dairy industry to save labor.

SLOTTED floors and a new revolution in manure handling are coming to the nation's dairy industry. Fresh from Europe, the idea is just now being tested in the United States.

As dairy herds become larger, every daily chore becomes a major labor requirement, and the biggest of these is manure removal. Slotted floors have served so well to reduce the labor in raising hogs that cattlemen are starting to use the idea to reduce their daily barn cleaning chores.

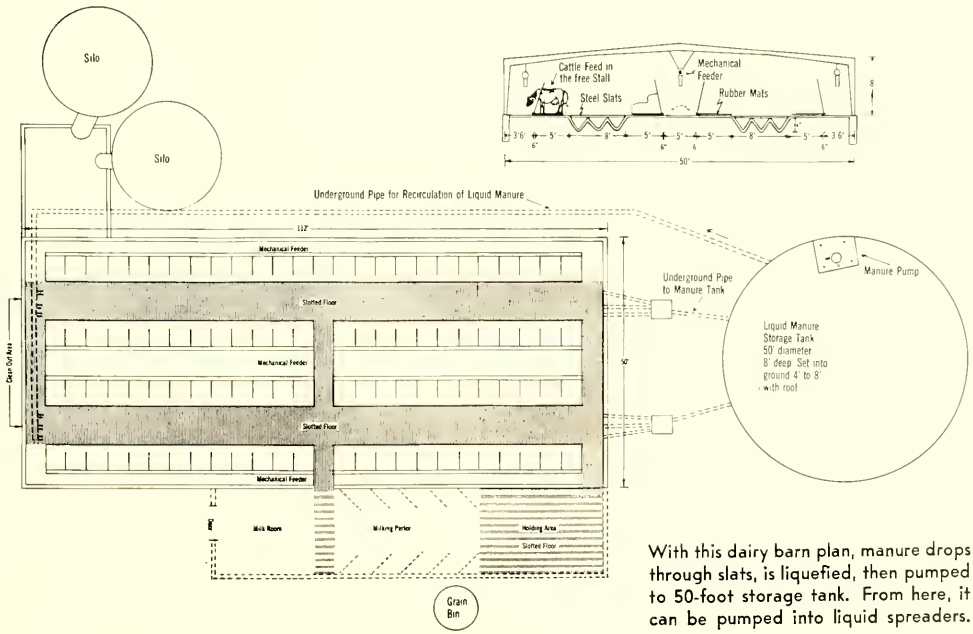
One plan features a section of slotted steel floor eight feet wide between rows of free stalls. The cross alleys and holding area also are slotted. Regardless of whether the cow is in the stall or in the alley, she must dung on the slats.

Slats of steel vary in width from 1½ to five inches wide. Slots between the slats will then vary from ¾ inch to 1½ inches wide. The narrower the slat, the narrower the crack. A three-inch wide slat would have a corresponding opening of 1¼ inches wide. Cor-Ten steel, which has proven resistant to corrosion in manure spreaders, is suggested for these slats. Steel slats are light-weight; long-lived; easily sanitized; and do not warp, chip, or crack.

European farmers have been using slotted floors for 25 to 30 years. Slotted floors are used in combination with free stalls for dairy cattle with manure being removed from beneath the floor in liquid form. Where complete slotted floors are used, it is common practice to allow the manure and urine to collect in a cellar beneath the floor. In this case, the urine is sufficient to make the manure a liquid without adding water. In dairy barns, liquid manure is recirculated from an outside storage tank through special tapered gutters and the liquid returned to the storage tank. This system requires addition of 20 percent water.

The modern dairy plan incorporates free stalls along with slotted floors. The floor of the stall is covered with rubber or plastic mats. With proper design of free stalls using mats, bedding is eliminated and the labor of storing, moving, and placing the bedding is avoided. In the northern dairy areas, the barn should be insulated and a well-

(Continued on Page 40)



With this dairy barn plan, manure drops through slats, is liquefied, then pumped to 50-foot storage tank. From here, it can be pumped into liquid spreaders.

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DAIRY COWS ON *Slotted Floors*

(Continued from Page 39)

engineered ventilation system installed.

The newest concept of all is that of feeding the cow in the free stall, now being tried in Europe. Feeding in the free stall gets double use from the free stall and the slotted floors. In the United States, the free stall is only a loafing area for the cattle. Having the stall as the feeding area eliminates the need for a separate feeding area and barnyard. At all times the cattle travel on slats, eliminating the need to scrape feeding areas and barnyards.

The plan incorporates mechanical feeding of haylage and silage to the stalls. With feeding mechanized and manure chores greatly reduced, the efforts of the dairyman can be focused on proper milking, feeding, and herd health.

Slotted floors eliminate the need of periodically scraping alleys behind free stalls. Storing of liquid manure in tanks will reduce daily field spreading of manure to a two- or three-day job every three or four months. In the north, it is important to provide storage so that liquid manure does not have to be spread in the severe winter weather. One thousand to 1,200 gallons of liquid manure storage per dairy cow is desirable for a 90-day period. A 50-cow dairy should have 50,000-gallon storage to eliminate the need to spread manure in December, January, and February.

Liquid storage tanks may be placed underground, partly above ground, or entirely above ground depending on terrain and drainage of the site. Tanks above ground are subject to freezing. Tanks partly above ground should be banked with earth and the roof covered with hay or straw to prevent freezing.

Liquid manure in the tank must be agitated prior to recirculation and before the tank is pumped out. This can be accomplished by installing a mechanical agitator or by using the manure pump. If the latter is the case, the pump must be designed to handle solids when it is used as an agitator. In Europe it is common to find 10- and 15-horsepower electric motors on the manure pump, which is also being used as an agitator.

Many European countries have provided three-phase electric power to the rural areas. Recently, these large-sized manure pumps have been designed to be tractor mounted for use in the United States. The manure pump correctly designed can serve as the agitator in the storage tank, recirculator for flushing down special gutters in the dairy barn, and to load the field spreader during the emptying of the storage tank.

In summary, the slotted floor dairy barn has eliminated the following:

1. Bedding cost and labor of placing bedding in stalls.

2. The daily chore of scraping dunging alleys, barnyards, and feed areas.

3. Daily spreading of manure in the fields. In addition, liquid manure spread at the proper time with all urine included has greater fertilizer value than manure spread daily on frozen ground.

The new dairy system includes several new practices which must be properly planned for best results. Before building, check your layout with informed agricultural engineers or building consultants. Slats must be well designed and spaced properly. Gutters beneath the slotted floor must be laid out for easy flushing. Liquid manure pumps should be engineered to pump heavy fluids and must be powered adequately. Storage tanks should be treated to insure many years of useful service.

The extra cost of slotted floors, manure gutters, stall mats, and liquid manure equipment results in savings which should pay off your initial investment in four to six years. It's a good investment in addition to eliminating dairy chore drudgeries. ◆◆◆

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"Marlate" methoxychlor is available in two formulations: "Marlate" 50, a wettable powder, and "Marlate" 2MR, an emulsifiable liquid. Use "Marlate" 50 for direct hand dusting of dairy cattle. Leaves no residue in milk when used as directed. Use either formulation for spraying beef cattle, and as a spray for controlling flies in farm buildings and around premises.

On all chemicals, follow labeling instructions and warnings carefully.

DU PONT Better Things for Better Living

By E. M. Leffert

Fished-Out Lake?

"FISHED-OUT lakes" are definitely NOT the places to try to catch a fast bass or a slow walleye! Waters are usually called "fished-out" if they lie close to metropolitan areas. From May to September, vacationers swoop down on nearby ponds to litter the shallows and churn up the deep. Before very long, fishing craft are forced from the scene.

But are these lakes really fished-out? A certain close-mouthed few catch fish, even record size, from such spots regularly. Throughout the country, members of this tiny, secretive clan seldom go home empty-handed. This is how "fished-out lake experts" operate.

First of all, learn what kinds of fish used to live in the target lake you select. A brief study can then be made about known habits of these particular fish.

For example, walleyed pike and smallmouth bass have a liking for deeper water, rocky shoals, and projecting sand or gravel bars. Largemouth bass and muskies often "stake out a shoreline" and stay put. Northern pike usually hang around underwater weedbeds.

Knowledge about natural food is important, too. Smallmouth bass and walleyed pike are seldom taken on frogs, but do search out certain types of minnows and chubs to eat. Both species also relish large gobs of night crawlers. On the other hand, largemouth bass and northern pike prowl the shallows in search of frogs and polliwogs, although they do not exactly turn up their noses at minnows and worms either. The ferocious muskellunge will "hit" most anything, and marauding muskies have tackled ducks, turtles, and even swimming squirrels to satisfy their appetites.

Is it better to use artificial or natural baits? Veterans say artificial baits are best liked because they're cheaper and much less trouble to cart around. But the most important factor of all is logic. Logical lures, presented in logical feeding or hiding places at logical times, cannot long fail.

The good caster has the ability to put himself within range of his quarry. Since most species move around, a good bet is to try the coves, points, or the bigger bays first. Try fishing the shoreline up against the bank with lures made for the job. A plain weedless hook garnished with a pork strip is a "natural."

When in doubt, troll. No one ever caught a tackle-buster on a "dry" plug or spoon. That's why this method of "fish-finding" is so successful. Trolling keeps you on the move in search of the big ones but lets you fish while doing it. When the first strike comes, quit trolling and start casting the area. Should the first "hit" take awhile, switch from deep-running baits to shallow, or from spoons to feathers. But whatever you do, never stop asking questions of veterans, or experimenting.

Most natural food for fish is near two specific depths of the water. Frogs, insects, and numerous water bugs are all found on or near the surface, while crabs and minnows live near the bottom. To fish in between is to waste valuable time. Actually, a half dozen lures (if they are the right kind) will serve you well.

But action and color are important. If you're lucky enough to catch a game fish right off, open him up to find out what he's been feeding on. Then try the lure that best imitates the darting action and color of the minnow you find inside.

Work the areas along the bank with lures made for the job. These smallmouth bass are from Maryland's Potomac River.

Although daybreak and dusk are among the best times to fish, night fishing is usually tops. All of the silent "fished-out lake" experts know this. The biggest trout, bass, walleye, and other kinds of trophy fish hit readily then. Surface and shallow running lures seem to stir up the most action. The biggest bass and walleyes can see as well after dark as before. When their supply of minnows heads for shore under cover of darkness, so do they.

Work the shallow, rocky points and bars thoroughly with spinners, feathers, and night crawlers for the walleyes. Huge bass can be angered enough by a commotion on the surface to smash at almost anything. Gasoline-burning lanterns can be mighty handy to have around when trying to untangle a knot. But if you want to catch a trophy fish and give the folks back on the dock something to talk about, leave all of the noise back at the pier with them.

Know-how can't take all the sporting uncertainty out of fishing, but it can boost your prospects tremendously. Why not fill the happy, warm months with pleasure and your freezer with the by-product of your knowledge? You can do it in that "fished-out lake" just a few miles from your home, where prizes are likely to be as big, or bigger, than anywhere else. ◆◆◆

TRIO WORK SHEET
HOW TO PUT
THE TRIO OF HIGH PROFIT PRACTICES
TO WORK ON YOUR FARM
STEP 2. DETERMINE THE
BEST PLANT POPULATION

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THE PRODUCERS OF FUNK'S G-HYBRIDS

Rows of Harmon Liles's broom corn, neatly baled, form a line behind him.

NEW MEXICO—Huge bales of broom corn, his supervised farming crop, are inspected by Harmon Liles before closing out another crop sale last fall. Living in a dryland area around San Jon, Harmon decided to raise this unique dryland crop as part of his farming program.

A $250 crop farming award last year meant a big boost for the Future Farmer and helped him get established for the 1963 crop season. In fact, he produced over 20 acres of the broom material. When his records were compiled at harvest, he checked in with a total yield of over 3½ tons.

Discounting the labor that Harmon puts in to pull the corn and bale it for shipment, broom corn is a rather cheap and simple crop to grow. With a net profit of $750 from last year's crop, the San Jon Future Farmer is looking forward to another successful broom corn harvest and a college degree, before returning to farm.

OHIO—There's always some bragging around the Southeastern Clark Chapter about who's the best bird hunter, so to decide once and for all who is best, members sponsored a Pheasant Tail contest. Running the duration of pheasant season in Ohio, Future Farmers opened the contest to all students of the local high school.

When the season had closed this past fall, there were 12 entries, ranging in length from 19½ inches to 24⅜ inches from tip to quill. Sonny Jones's big bird feather won him the contest and two boxes of shotgun shells, not to mention the envy of a lot of Future Farmers around the school.

Runner-up with a 23⅝-inch feather was Lynn Dickerson. His award was a box of shotgun shells. Actually, his feather was only about ¼ inch longer than that of third place winner Dave Queen, who walked away with a gun cleaning outfit for his effort in bringing down a long-tailed bird. Committeeman Dick Kitchen proclaimed the contest a success in both interest and settling the best pheasant hunter controversy.

David Carpenter's market hog was grand champion at the Cow Palace.

CALIFORNIA—Members of the Red Bluff Chapter piled in trucks and a school bus this spring and headed toward San Francisco's famous Cow Palace and the spring livestock show. In all, there were 20 chapter members and three instructors making the week-long stay at the Golden Gate City.

Riding in Chapter Reporter Rusty Murchison's truck were chapter members' pigs and lambs. Two other trucks brought the remainder of the livestock, while the school bus accommodated the Future Farmer owners.

When the judging cleared, Dave Carpenter had walked off with the champion Hampshire pig and the reserve champion crossbred pig. His award was 40 cents a pound for the 180-pound champion. In fact, the entire Red Bluff Chapter received a feeding efficiency award from Cal Poly's Collegiate FFA Chapter before leaving for home. The week-long stay brought awards and experience plus plans for another trip next year.

Across the U. S. A., Future Farmers Are "Learning to Do; Doing To Learn; Earning To Live; and Living To Serve."

ILLINOIS — Ever driven through a strange town and wondered where the high school was located? Members of the Tonica Chapter had many times, so they decided to do something about it in their town recently.

Getting the cooperation of the FHA chapter at the high school, Advisor George Irvine and his Future Farmers had a sign painted that read "FHA-FFA Welcomes You to the Tonica H. S." Both the FFA and FHA emblems had a prominent place on the colorful sign board.

Advisor Irvine and Tonica members feel there is an excellent opportunity to serve the local community in this way yet still promote the FFA. Tonica's sign is at the edge of town along the main thoroughfare.

"I believe there is a direct correlation between the town's schools and its citizens," Advisor Irvine told us. The favorable comments on his chapter's sign give proof to his belief.

LOUISIANA—Tractor driving is a dual affair down Fenton way in Louisiana. Each spring during the annual "Aggie Day," Future Farmers sponsor a father-son tractor driving contest over a self-made obstacle course.

Fathers drop their farm work and come to town to pit their skill with their sons against other Future Farmer-father teams. Contestants must drive a tractor hitched to a trailer through gates, back it, turn corners, then park it without flaws.

Future Farmers go through the course first, park the tractor, and leave the motor running for their fathers. The father then goes through the course, this time shutting off the motor after parking. Judges carefully check for numbers of markers touched, rough clutching, stalling the engine, and time required to go through the course.

THE FFA IN ACTION

WYOMING—When a huge Air Force Titan II missile hit a pinpoint target 5,800 miles away recently, a Wyoming Future Farmer could be proud of his contribution to his country. Robert Dale Neal, a State Farmer and former member of the Shoshoni Chapter, had perfected a new technique in the autopilot of the missile that helped accomplish the mission.

The technical discovery netted the former Future Farmer an "Engineer of the Month" certificate from the Air Force plus acclaim from his fellow officers at Riverside, California. His discovery in mathematics will save many hours of labor on our missile program in the future.

Lieutenant Neal served as president of the Shoshoni FFA Chapter, was winner in district and regional public speaking contests, and attended the National FFA Convention for two years as a delegate. His degree from Colorado State University in engineering in 1960 and a commission in the U. S. Air Force put him in the highly technical missile field, where his outstanding work has won him the recent engineer honor.

Reading's beef chain began when Cal Dickinson presented a heifer to Fred Reppert, center. Jim Brouse looks on, left.

MICHIGAN—Swine chains among Michigan FFA chapters are quite popular, but few have a beef chain going these days like the Reading Chapter in Hillsdale County.

Just this spring, a local cattle breeder, Calvin Dickinson of Camden, started Reading's beef chain when he donated a registered Angus heifer to the chapter. She was a beauty, a seven-month-old heifer valued at over $250. The lucky Future Farmer recipient was Fred Reppert, a sophomore and second year member of the FFA.

The first heifer calf from Fred's animal will be given back to the chain and then to another deserving Future Farmer at Reading. Advisor Gordon Bloom is acting coordinator of the program. As he explained, it is the plan of both him and Cal Dickinson to establish large beef breeding herds in the Reading section of the county among young farmers. Some day beef may be a major enterprise there.

This year, Jimmy Hoppe and his dad, Carl, walked off with top honors. Runner-up was Larry Corbello and his father, Albert. Both were recognized at the Father-Son Banquet after the contest.

Two Future Farmer winners and fathers pose proudly after the awards dinner.

OKLAHOMA—At Rush Springs Chapter, Future Farmers learn basic welding in vo-ag class, then put it to practical use after school at nearby Cline Industries, a welding shop in town. It's all part of a cooperative program that the welding shop owners have arranged with Advisor Al Lawrence.

Future Farmers begin welding as Green Hands at Rush Springs and progress through more complex exercises. The local welding concern uses the vo-ag students after school hours in such areas as tack welding and production line welding on pickup bumpers. It's experience that is valuable for Future Farmers planning to have a farm shop.

The Clines welcome the chance to hire FFA members, and some have even stayed on at the shop after graduation. Proof of community cooperation is the enthusiasm both employer and students share, each benefiting in his own way.

Oklahoma Farmer-Stockman Photo

Future Farmer Clarence Ballard, left, decided to become a full-time welder.

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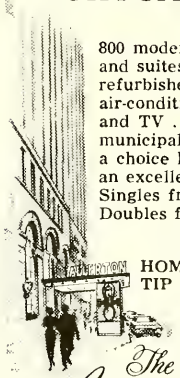

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History of the Breed

The Appaloosa

FROM ANCIENT Chinese and Persian art dating back some 500 years before the birth of Christ has come evidence of the multi-colored Appaloosa horse. Records are scarce on their beginning, but historians believe that early Appaloosas were loaded aboard trading ships in the early 1600's and brought across the ocean to Mexico from the Near East.

It was here that the wandering plains Indians came across these rare-colored horses on the Mexican Peninsula. The spread of the Indian tribes northward placed the horses in the Nez Perce Tribe about the year 1730. Early white explorers found these spotted horses only within this group of Indians living in the area now covered by parts of Oregon, Washington, and Idaho. The Nez Perce had chosen them for their unusual handling qualities and characteristic markings, breeding them in preference to all other breeds.

For the next 100 years, the Nez Perce carefully bred their horses, forming them into a distinct type. The lush summer range among the hills and meadows of the Northwest, coupled with winter shelter in the canyons of the Snake, Palouse, and Clearwater Rivers, made the area ideal for horse production.

Carefully, the Indians traded off inferior stock to neighboring tribes. Undesirable stallions were castrated, and ideal stock was bred and rebred for the young Indian braves. The Nez Perce raced their horses, eliminating the slow ones. Close contact with people brought out the gentle, quiet disposition we now know in the Appaloosa.

The colorful horses of this Palouse River area came to be called Palouse horses. A Palouse became slurred to Apalouse and Apalousie and later Appaloosa. The rich land dominated by the Nez Perce was soon to be plowed after the American Civil War, and pasture lands were fenced for domestic stock. Appaloosas dwindled in number and were scattered over the expanding West. Today the descendents of these early Appaloosas are found in almost every state in the U. S. Once used for war, racing, and buffalo hunting, they have become the stock horse or pleasure mount of present day riders.

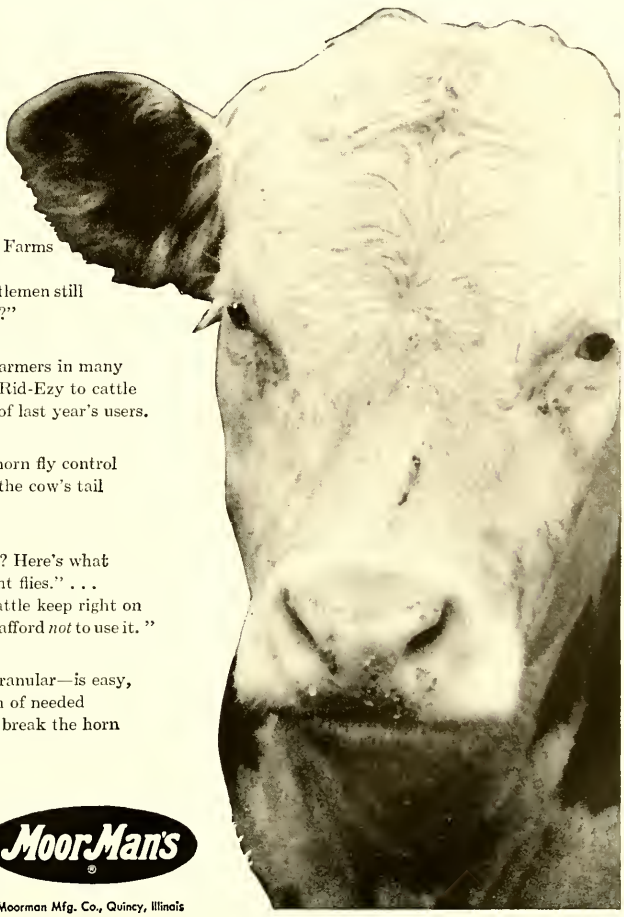
Appaloosas are intelligent horses with quiet, gentle dispositions. These qualities coupled with endurance and speed, make them ideal stock and pleasure horses. Recent surveys among Appaloosa owners found 63 percent using them for stock purposes, 30 percent listing pleasure uses, and the remaining owners listing anything from show to jumping to drill. This indicates the many roles the modern Appaloosa can assume.

The Appaloosa ranges in height from 14.2 to 15.3 hands, and weighs from 950 to 1,175 pounds. In appearance, the Appaloosa is completely distinctive, as no two have identical patterns of markings. They are mottled, having an irregular spotting of black and white, most of this being over the hips. Although their coat patterns vary from specks to egg-shaped spots, all have eyes encircled by white the same as a human eye. Many mares are a mottled roan over their entire body.

With breed headquarters at Moscow, Idaho, the Appaloosa Horse Club had over 15,000 horses registered at last count. Their job is to promote and coordinate the "western stock horse that is a pleasure to ride."

Last year's users say:

"Free-choice Rid-Ezy stops horn flies"



Control horn flies effectively just by *feeding* something?

Many cattlemen naturally were skeptical last summer when MoorMan's announced that free-choice feeding of Medicated Rid-Ezy® would do the job. It had worked in seven years of MoorMan Research—with cattle on our own Research Farms and in tests with cooperating farmers and ranchers in 14 states. But cost-conscious cattlemen still wondered: "Will it *really* work with *my* cattle?"

Now the answers are in from ranchers and farmers in many parts of the country. Free-choice feeding of Rid-Ezy to cattle on grass *does* stop horn flies, say thousands of last year's users.

"Excellent control all summer" . . . "Same horn fly control as with once-a-week spraying" . . . "Makes the cow's tail obsolete." Those are typical reports.

But does the investment in Rid-Ezy pay off? Here's what users say: "Cattle could graze instead of fight flies." . . . "Heaviest calves I've ever weaned" . . . "Cattle keep right on gaining through dry, hot weather" . . . "Can't afford *not* to use it."

Free-choice feeding of Rid-Ezy—blocks or granular—is easy, too. And it provides a complete combination of needed minerals as well as a systemic insecticide to break the horn fly cycle.

Your MoorMan Man has all the details about safe, summer-long feeding of Medicated Rid-Ezy to rid grazing cattle of both horn flies and cattle grubs.

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Summer Photo Tips

Photos by Westinghouse

IT'S SUMMER on the farm, and days will be filled with chores, haying, and chasing those pesky stray calves. You can capture some of these experiences, plus those off-farm weekend trips, on film by knowing a few of these summer photo tips.

The best photographs tell a story. Your subjects should be "doing," not just "being." Action makes your pictures interesting not only to you but also to your friends. When taking still or action shots, make sure you find the camera angle that sets off your subject best. Check several angles through your viewfinder; pick the best for your shot; then shoot away. And it's worth remembering that an experienced photographer generally shoots from several different angles and vantage points to get one good picture.

Always press the shutter release all the way down SLOWLY. If you do it in one quick shove, you may cause the camera to move at the instant the shutter opens—and your photograph will be blurred.

Try flash lighting outdoors even in sunlight when taking pictures under 15 feet. You won't have to change the exposure, incidentally, unless the subject is less than six feet from you. The flashbulb in sunlight will give you better photos, free from rash shadows. Also, the extra light serves to lighten deep shadows around the eyes and lends additional sparkle to facial features. Remember, with your subject not looking into the sun, you can catch the smile instead of the squint.

If your subject is to be taken close-up at from three to seven feet, try placing a handkerchief over the face of the flash reflector. This reduces the light by about one-half, as well as improves the exposure and softens strong shadows common in close-up work.

Check to make sure you aren't aiming directly at a highly reflective surface such as a window, mirror, or polished object. Shoot at an angle to the reflecting surface if you can't move your subject.

When your subject is near a pond or on a beach, use the sand and water as a giant reflector. You can shoot with the sun as a sidelight at normal or slightly slower speeds. And for even more dramatic effect, try using the sun as a backlight reflecting off the water or sand. Either way you'll need less camera exposure setting than on grass or less reflective surfaces.

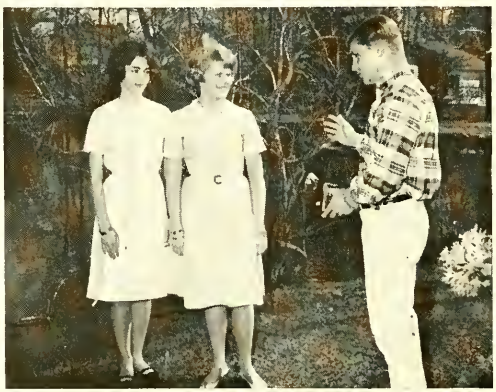
Check your flash attachment. If it isn't fixed in one position, you can use it to bounce light off the walls and ceilings to get the effect of regular room lighting. This can be done by simply opening your lens two openings more than normal and pointing the flash reflector at a ceiling or wall opposite the subject. It won't be necessary to turn off the regular house lights. They won't affect the exposure.

A novel way to get good flash pictures is by using the extension sockets found on many camera flash attachments. Replace the regular bulb of a nearby table or bridge lamp with a "screw base" flashbulb; then plug the cord of the lamp into the flashgun. Set the extension lamp to the side or behind the subject at about one-half the distance you are away with the camera. This technique will "edge-light" the hair and produce pleasing shadows. You won't have to change your regular exposure setting; just be sure the lamp switch is on so it will flash at the same time.

Color snaps are at their best on clear, bright days when you can use fast shutter speeds and small lens openings. Be sure to use outdoor fill-in flash to compensate for bright shadows on your subject. For indoor color flash, bear in mind that colored surfaces will reflect colored light. Unless your walls are white, steer clear of bounce-flash techniques.

Here are some final outdoor camera pointers: (1) Bring the camera with plenty of flash and film. (2) Keep the camera handy, not back in the car. (3) Carry a small notebook to keep track of names and places you might forget. (4) Include localized backgrounds such as road signs or buildings to help you link the places and people.

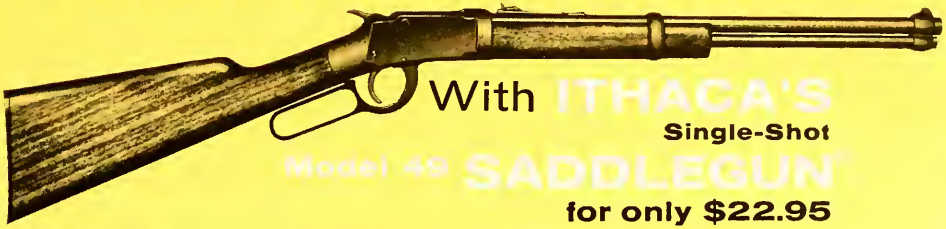
These long, eventful days of summer can be yours for years to come with a camera, some film, and a bit of "know-how." ◆◆◆



The closer you are to your subject when using flash, the less noticeable will be the shadow effect of the sun. In backing off a little, you will get a more artistic effect.

Flash eliminates unsightly shadows and makes possible a sharp, brilliantly detailed photo. Note difference with no flash with left photo, flash fill-in with right photo.

Put Fun in Your Farming This Summer



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Styled after the famous gun that laid down the law in the Old West, the Saddlegun is rugged enough to go anywhere, accurate enough to hit anything you aim for — from plinking at cans to smacking down varmints. Made to be carried, it measures just 34½", weighs only 5½ lbs. And it's chambered for .22 shorts, longs and long rifle cartridges, with a special Magnum model available.

The Saddlegun is safe, too. Its "rebounding hammer" acts independently of the lever action: It must be hand-cocked before the gun will fire. This means double safety—a point of real interest to you and your parents. The barrel is of blued steel, made for great strength and accuracy. Stock and forend are of solid, handsome American walnut. This is a gun that is a pleasure to own as well as to shoot.

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Pest Shooting For Sport

By Joe Linduska

The wary woodchuck, found almost everywhere, makes an ideal summer pest to hunt. This expert passes on tips for you.

Miss the woodchuck with your first shot? Hurry to his hole; then wait a short distance behind it. He often comes back out after a while to see if you have gone.

GROUNDHOG, woodchuck, whistle pig, or marmot. Call him what you will, he's a prime hunting target wherever he occurs. And that's nearly every place.

This rodent has a king-sized capacity for clover, alfalfa, and other choice forage. It's this ravenous appetite, together with his habit of tearing up the landscape, that brings him in conflict with farmers.

With the warm days of spring, hibernation ends and groundhogs appear on pastures, hayfields, and rocky slopes. They breed soon after emerging, and four to six young are born 31 to 33 days later. They're the size of a meadow mouse and blind and hairless. A few weeks later they emerge as squirrel-sized replicas of the parents.

Chuck hunting is becoming such a popular sport that some hunters have their own conservation program. Instead of shooting adults when they first emerge in the spring, they delay until reproduction has occurred and the young appear above ground. This measure at least doubles the number available for hunting, for this is one sport that runs the gamut from plinking with a .22 to precision shooting with elaborate equipment.

Many hunters use the farm boy's standby, a .22 rim-fire. This caliber is accurate within a limited range, and its effective use on chucks requires careful stalking. After locating your quarry, ease into range by using the natural cover of a fence row, gulley bottom, or some similar obstruction between you and the chuck. The final stalk may be on hands and knees or in a prone position.

The groundhog is a tough target, and an animal shot in the body invariably will make it to the burrow. Try to approach close enough for a head or chest shot. As you'll learn, these animals are wary and keen of eye. You'll be disappointed on many stalking attempts, and on those occasions try this: As soon as the animal pops into the burrow, hasten to the den; then sit quietly 30 or 40 feet *behind* the opening.

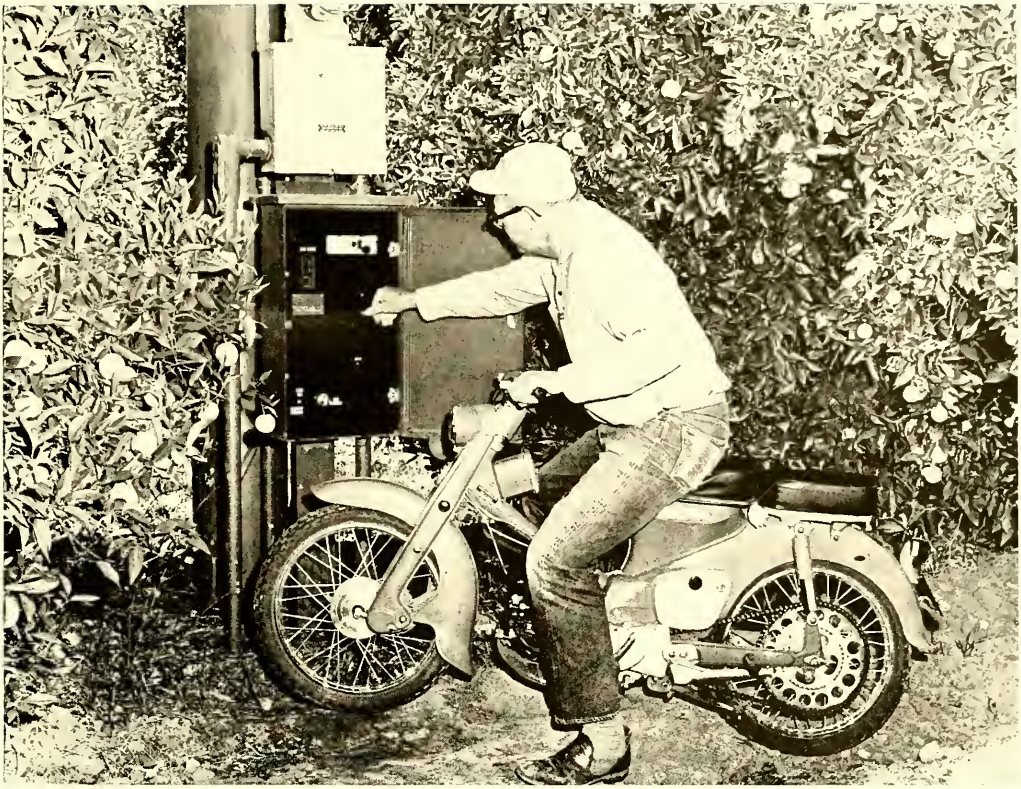
Usually in a few minutes the animal will emerge facing away. Have your body and rifle in position for the head shot which is offered as the animal cautiously peers out. Use hollow point bullets in the long rifle load, and between hunts, sight your gun periodically so you know precisely where it's shooting at ranges out to 50 yards.

If you're like most chuck hunters, you'll quickly graduate from this type of hunting to precision shooting with one of the high velocity, center-fire loads. One of the best in densely settled farming areas is the .222 Remington. In a bolt action rifle, mounted with a six- or eight-power scope, you can expect to connect regularly at 200 yards. And if you use a rest and sandbags to steady your aim when shooting prone, 300-yard kills are not unusual.

Even longer shots are possible by going to one of the rifles in the 6 mm. class, such as the 243 Winchester, 244 Remington, or 6 mm. Remington. The last-mentioned is a new load, just out. Its 100-grain bullet leaves the muzzle at 3,190 feet per second and is still hurrying along at 2,420 feet per second at 300 yards. Trajectory is important

(Continued on Page 52)

The real challenge in woodchuck shooting lies in the long shots from 300 up to 500 yards. Arthur Elliott tries a 300-yard shot using a .222 caliber Remington.



C. R. Griffith is a citrus rancher in California's Ojai Valley. He rides herd on his orange trees with this Honda Trail 55. "Takes me places I can't get to with a pick-up," Mr. Griffith told us. "I use it to check wind gauges, irrigation equipment and do a hundred other jobs I used to do on foot." Enthusiastic reports like this explain why Honda is fast becoming the nation's most versatile farm vehicle. For address of your nearest dealer or other information, write: American Honda Motor Co., Inc., Dept. BY, 100 West Alondra, Gardena, Calif.

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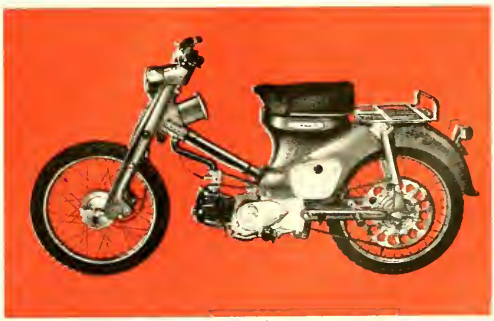

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Doylestown, Bucks County, Pennsylvania

A western woodchuck hunter checks out the grassy slopes from a vantage point on a high ridge. Rocky outcrops make it an ideal habitat.

Pest Shooting For Sport *Continued*

in chuck hunting, and the flat shooting 6 mm. is only 6.5 inches low at 300 yards when sighted to hit the point of aim at 200 yards. These calibers are all adequate for game up to the size of deer, and using them on chucks combines summer sport with practice for deer season.

In long-range chuck hunting, accuracy is more important than the speed with which the second shot can be fired. Since bolt actions are inclined to be more accurate than pump actions and autoloaders, most determined chuck hunters use this style. And, of course, long shots make scope sighting a must. The new variable power types, such as 3X to 9X, make it possible to use the same equipment for groundhogs in summer and big game in fall.

You'll quickly learn in chuck hunting that the animals are responsive to weather. They are active on quiet, sunny days, particularly in early morning and late afternoon. In hot weather they hole-up through midday; and wind, rain, or other inclement weather will often keep them in their burrow all day long.

This big woodchuck will no longer raid the author's garden. His son got him.

Most hunters drive the farm lanes and back roads in scouting the animals. Sunny sidehills or most any well-drained slope may contain a den; and give a long look down brushy fence rows and along the edge of thickets and the border of brushpiles. They love to burrow in, or adjacent to, such woody cover.

A pair of binoculars is extremely helpful in spotting the animals, especially as the season advances and vegetable growth gets tall. The hunting of hay fields is best done in early spring before growth hides the animals or following cuttings. On pasturelands, chucks are easily spotted throughout the summer months, but special care should be exercised where such fields are being used by livestock.

As pleasurable as chuck hunting is, no one target is worth risking damage to property or injury to a farm animal or a human. Be sure of your target and be sure, too, that the backdrop is adequate to contain the misses. They happen, now and again, even with the best of us.

"Have you . . . been waited on?"

Sportrait

by
Stan Allen

Jack Nicklaus sinks a putt.

THE longest driver on the golf courses is young Jack Nicklaus of Columbus, Ohio, who consistently drives the ball close to 300 yards. He is the brightest star on today's professional tour.

Jack received his first set of clubs when only 10 years old and was soon shooting in the low 80's. A natural all-around athlete in his school years, he played basketball, football, baseball, and was a member of the track team. His golf game improved so steadily that he qualified for his first National Amateur Championship in 1955 when only 15 years old. He lost that match on the final hole, but it made Jack decide that a golf career was for him.

He beat professionals in the Ohio Open in 1956 but soon went into a slump. His win of the National Amateur Championship in 1959 seemed to get him back on the right track. Selected as a member of the United States Walker Cup Team, he won an amazing 29 out of 30 matches and sparked his team to a win over the British. Jack was then invited to play in the amateur division of the 1960 U. S. Open Tournament at Denver. He finished second to Arnold Palmer by only two strokes, the highest finish by an amateur in 27 years.

Invited to the U. S. Open again in 1961, Jack finished fourth. However, he did win the '61 National Amateur Championship again. It was the seventh time he had qualified for that event. After the Open, he went to Mexico to help the United States win the America's Cup against Canada and Mexico. It was after this event that Nicklaus decided to turn professional.

Jack got off to a slow start on the pro tour and finished 50th in his first tournament, the Los Angeles Open. His game soon began to jell as he finished second in the Thunderbird Classic and then went on to the U. S. Open at Oakmont, Pennsylvania. He and Arnold Palmer battled to a tie at 283 strokes; then Jack won the play-off by three strokes. The 22-year-old youngster had beaten the great Palmer at his specialty, a play-off. The pros were beginning to take notice of Jack Nicklaus now.

A professional golfer's standing is measured by the amount of money he wins, and Jack set a record in his rookie year that could stand for a long time. He won a total of $61,868 in PGA play. Adding his $50,000 purse from the unofficial World Series of Golf, his total winnings from golf amounted to an amazing $111,868. He easily won "Rookie of the Year" honors.

Jack's first win in 1963 came in February when he won the Palm Springs Classic. He traveled to Augusta, Georgia, in April to win his first Masters Tournament. At the age of 23, he became the youngest player ever to win that event. His victories last year included the Tournament of Champions, the PGA Championship, and the Sahara Invitational in addition to placing high in the money in 12 other tournaments. He finished second in PGA money winnings last year with $100,040. Adding his winnings from unofficial matches, his total winnings amounted to $152,903.96, which topped the list.

Jack's scoring average of 70.42 strokes topped the pro ranks, too, but since the PGA did not then consider him a Class A player, he was not eligible for the Vardon Trophy. All in all, this was a good year for a 23-year-old golfer. He traveled to France to team up with Arnold Palmer to win the Canada Cup for the United States, becoming the individual champion.

Going into the middle of February, 1964, Jack had entered two tournaments and had won one. At that point he was leading in official winnings. Just 24 now with better than 10 years of competitive experience behind him, he has the potential to set an All-Time Tourney Win record that will stand for a long time. He has all of the shots of the game and a good temperament to go with his youth. A healthy Jack Nicklaus could soon become "King of the Links."

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The First One Doesn't Have A Chance!

At the traffic window in our courthouse, the man ahead of me looked displeased as he paid his fine. When the clerk handed him a receipt, he growled, *"What do I do with this?"*

"Keep it," said the clerk cheerfully. *"When you get 10 of them, you get a bicycle."*

Ronald Ericksen
Nebraska City, Nebraska

Tenderfoot: *"How can I tell mushrooms from toadstools?"*

Second class scout: *"Eat some before you go to bed. If you wake up the next morning, they're mushrooms."*

Floyd Strader
Rock Cave, West Virginia

He: *"Girls don't interest me. I prefer the companionship of the boys in my class."*

Him: *"Yeah . . . I'm broke, too!"*

David Mikkelson
Minot, North Dakota

Jackie's aunt from the country was visiting at his house. She was a pleasant woman, weighing about 200 pounds. On the night of her arrival, Jackie wanted to stay up later than usual.

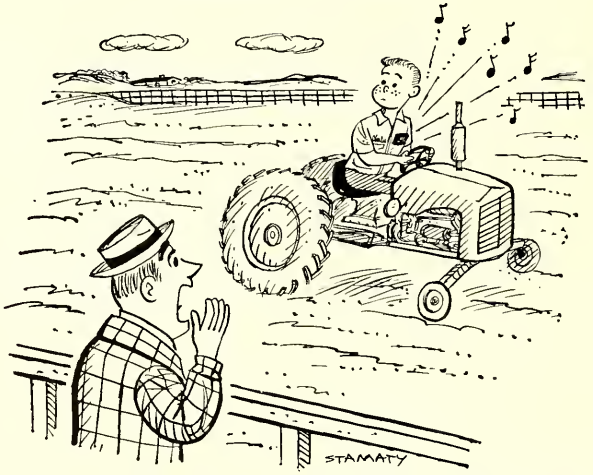
"Why, Jackie," his aunt said, *"I'm so much older than you, and I go to bed with the chickens every night."*

Jackie studied her in silence for a while and then said wonderingly, *"I don't see how you ever get up on the roost."*

Jack Griffith
Audubon, Iowa

"This year we're gonna raise crops untouched by human hands."

Charlie, the Green Hand



Charlie, turn down your transistor. The neighbors are complaining!"

In a small town the sheriff was also the veterinarian. Late one night he received a frantic phone call. *"Do you want me as a sheriff or a vet?"* he asked.

"Both," came the reply. *"We can't get our dog's mouth open, and there's a burglar in it."*

William Habeck
Adell, Wisconsin

A little boy was walking down the street with a little brown dog when around the corner came a man with a big boxer. Suddenly the boxer broke away from the man and ran toward the boy and dog.

When all at once the little brown dog opened his mouth and swallowed the big boxer, the amazed man asked, *"What kind of dog is that?"*

The little boy replied, *"Before my father cut off his tail and painted him brown, he was an alligator."*

William Silcott
Chillicothe, Ohio

I borrowed $20.00 from a man, and last week he came around to collect. When he asked where his money was, I replied, *"I'm broke. Remember, you can't get blood out of a turnip."*

So he hit me smack in the nose. My nose bled, which proves one thing: I'm no turnip!

Sherman Mudd
Millwood, Kentucky

Among the many puzzling words in the English language is the word "economy," which means the large size in soap flakes and the small size in automobiles.

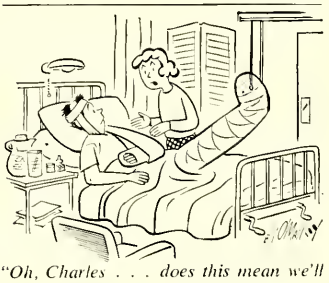
Dick Medina
Ordway, Colorado

Now I lay me down to sleep;
The teacher's dull, the lecture deep.
If he should quit before I wake,
Kick me hard, for goodness' sake!

Jerry Halloran
Eyota, Minnesota

Two leopards in the zoo had just finished their lunch. One sat back and sighed in contentment: *"Mmm! That really hit the right spots."*

Pat Michael
Goshen, Indiana



"Oh, Charles . . . does this mean we'll miss the school dance?"

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Ph.D. MAKES GOOD

So what? Aren't Ph.D.'s *expected* to make good? Eugene Merrill happens to hold a doctor of philosophy degree from Bob Jones University; but this is not the measure of his success—not in God's eyes anyway.

God wanted Gene to preach. Gene wanted a career in dramatics. One day, while reading a national news magazine, he came upon a feature story on Bob Jones University. To his delight, the "World's Most Unusual University" was pictured as "placing a red carpet of culture on the sawdust aisle." Here one could get professional radio, TV, and dramatic training in an orthodox, Christian framework. This, Gene thought, would surely be a compromise acceptable to God. Not so! After only a few days on campus, God impressed on him so strongly the call to preach that Gene could resist no longer. In submission to God, his talents were not wasted. In fact, Gene took an undergraduate double major in Bible and in speech.

Doctor Merrill has "made good" because *Gene* discovered while a college freshman that to be conquered by Christ is great gain.

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